ORDER NO. KM48805688C1

Service Manual

EASA-PHONE

ELECTRONIC MODULAR SWITCHING SYSTEM

KX-T61610-1



SPECIFICATIONS\TEXHU4ECKUE XAPAKTEPUCTUKU

NAME AND LOCATION\HAИMEHOBAHИЕ И РАСПОЛОЖЕНИЕ

CONNECTION\COEДИНЕНИЯ

PROGRAMMING\ПРОГРАММИРОВАНИЕ

ІС І/О DATA\ИНФОРМАЦИЯ О МИКРОСХЕМАХ ВВОДА/ВЫВОДА

BLOCK DIAGRAM\БЛОК - CXEMA

TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES\LOKOJEBKA UHTEPPAJEHEN CXEM, **ТРАНЗИСТОРОВ И ДИОДОВ**

SCHEMATIC DIAGRAM\ПРИНЦИПИАЛЬНЫЕ СХЕМЫ

WIRING CONNECTION DIAGRAM\CXEMA СОЕДИНЕНИЙ

IC BLOCK DIAGRAM\БЛОК - СХЕМЫ ИНТЕГРАЛЬНЫХ СХЕМ

EXTENSION CORD CONNECTING METHOD\ПОДСОЕДИНЕНИЕ СЕРВИСНЫХ КАБЕЛЕЙ

ADJUSTMENTS\PEГУЛИРОВКИ

EXPLODED VEIW\СБОРОЧНЫЙ ЧЕРТЕЖ

ACCESSORIES AND PACKING MATERIALS\ПРИНАДЛЕЖНОСТИ И УПАКОВОЧНЫЕ МАТЕРИАЛЫ REPLACEMENT PARTS LIST\CПИCOK ЗАПАСНЫХ ЧАСТЕЙ

Panasonic

Matsushita Services Company 50 Meadowland Parkway, Secaucus, New Jersey 07094

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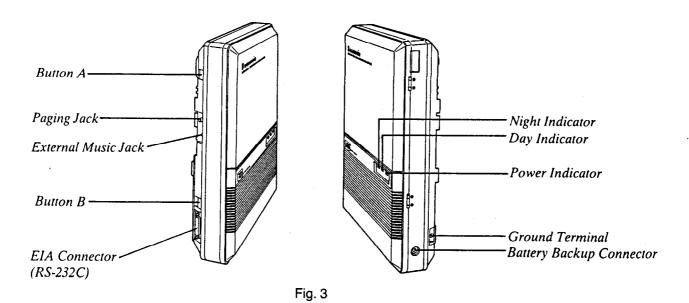
SPECIFICATIONS

General Description

·	•		
1. Capacity	Outsides (CO) 6		
	Stations 16	•	
2. Control Method		nits CPU 4 hits CPU	
		KB, Control RAM: 16 KB	
3. Switching			
4. Power Supplies		AC 120 V 60 Hz	
+. Tower supplies	Secondary	Station Supply Volt: -24 V,	
	Secondary		
	Daman Failuna 66 autai dan	Circuit Volt: $+5 V$, $\pm 13.4 V$, $-24 V$, $-18 V$	
		assigned to stations (1 through 6)power	
	failure trai	•	
		eration for 4 hours by optional Backup	
5 Dialina	Adaptor.	D' I D. L. JODDC	
5. Dialing	Outwara	Dial Pulse 10PPS	
		Tone Dial	
	Internal	Dial Pulse 10PPS, 20PPS	
		Tone Dial	
	Mode Conversion	DP-DTMF, DTMF-DP	
6. Intercom paths			
7. Connector	Outsides (CO)	Modular Jack (RJ-11)	
	Station	Modular Jack	
	Paging Output	Pin Jack (RCA JACK)	
	External Music Input	two-conductors Jack (MINI JACK %4 inch	
	· · · · ·	diameter)	
8. EXT Connection	Cable	1 pair wire (Standard Telephone)	
		2 pair wire (KX-T61630/KX-T61620/KX-T61650/	
		KX-T30830/KX-T30820/KX-T30850)	
9. SMDR	Interface	RS-232C	
(Station Message \	Output Equipment	Printer, Data Terminal	
Detail Recording)	Detail Recording	Date, Time, Ext. Number, CO Number,	
(Beilli Recording)	Detail Recording	Calling Number, Calling Time, Account	
		Code	
10. Dimensions	$334 (W) \times 437 (H) \times 107 (D)$		
To. Dimensions	$(136/32'' \times 177/32'' \times 47/32'')$	y nunc	
11. Weight			
12. Power Consumption	10 W (Max)		
12. I ower Consumption	+0 W (Max.)		
	•		
Characteristics			
1. Station Loop Limit	KX-T61630/KX-T61620/R	(X-T61650)	
2. Similar 2007 2	KX-T30830/KX-T30820/F		
	Standard Telephone	600 ohms including set	
	Doorphone	20 ohms	
2. Minimum Leak Resistance		20 Onnis	
	15,000 onms		
3. Maximum Number of Station	1 (EV T(1/20 EV T(1/2	00 TEN M(1/60 TEN M0000 TEN M0000	
Instruments per Line		20, KX-T61650, KX-T30830, KX-T30820 or	
	KX-T30850)		
	Or 6 sets/Ringing group	(Ringing group (4 groups)	
A Ding Voltage	6 sets/Ringing group ——		\neg
4. Ring Voltage		on Kinging Load	ᆜ
5. Primary Power		Ext. 12, 16, 20, 24	\neg
6. Central Office Loop Limit			ニ
7. Environmental Requirements		Ext. 13, 17, 21, 25	\Box
8. Hookswitch Flash Timing Range	204–1000 msec	Ext. 14, 18, 22, 26	\neg
		(LAL. 14, 10, 22, 20	

Design and specifications are subject to change without notice.

NAME AND LOCATION



Push Buttons A and B simultaneously to open Front Cover.

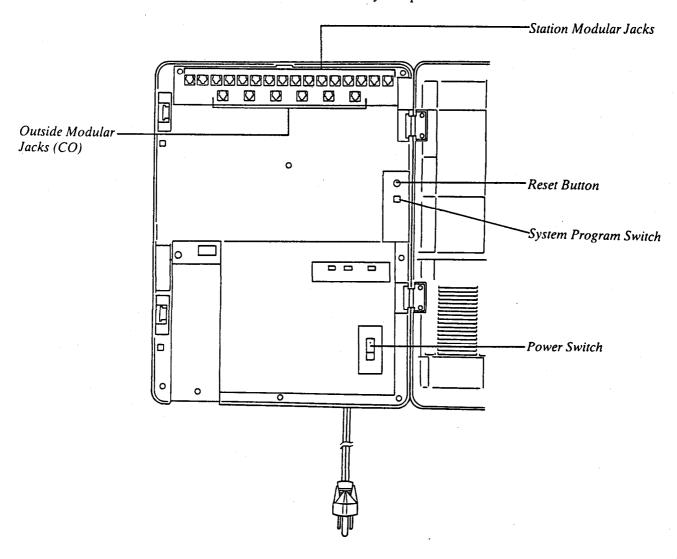


Fig. 4

CONNECTION

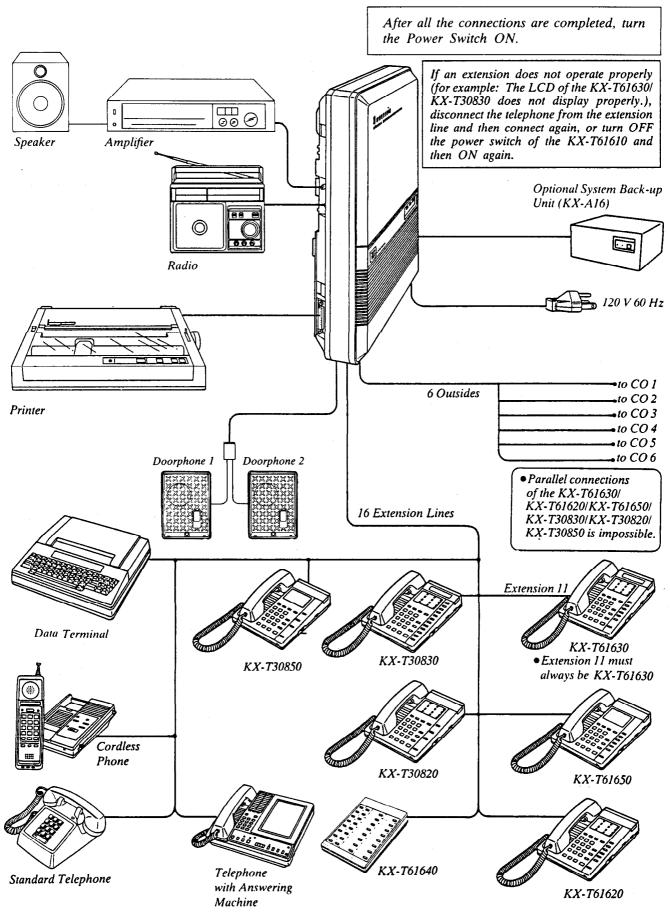


Fig. 5

PROGRAMMING

Programming Instructions

1. At extension 11:

All system programming changes (example: system clear, station program clear, toll restriction, hookswitch flash timing...) are done through extension 11.

- •Extension 11 must always be a Panasonic model, KX-T61630.
- 2. System Program Switch setting:

The System Program Switch located on the KX-T61610 must be set to the PROGRAM position while making program changes. After all programming changes are completed, return the program switch to the SET position.

3. Overlay:

This overlay is used for programming the system and the program function names are inscribed on this card.

- 4. Before system programming, operate the system clear and station program clear to set to the default data of the programming.
 - A. System Clear:
 - 1 Dial (99).
 - "SYSTEM CLEAR" will be displayed.
 - 2 Press the NEXT button.
 - •"ALL CLEAR?" will be displayed.
 - 3 Press the MEMORY button to clear system.
 - 4 To exit from system clear, press the END button.

The following features are preset as the default data.

Date and Time Setting
System Speed Dialing
CO Connection Assignment
Dial Mode (Tone/Pulse) Selection
Switching Mode (Day/Night Service)
Starting Time (Day/Night Service)
Flexible Day Outward Dialing Assignment
Flexible Night Outward Dialing Assignment
Flexible Night Ringing Assignment
Flexible Night Ringing Assignment
Toll Restriction—Class Assignment
Toll Restriction—Area Code Selection
Programmable Operator Call
Host PBX Access Codes Assignment

Automatic Answering (Automatic/Manual)

Selection

Preferred CO Line Assignment Programmable Call Waiting Duration Time Count Start Mode SMDR Communication Parameters System Data Dump SMDR Incoming/Outgoing Selection Hookswitch Flash Timing Disconnect Time Calling Party Control (CPC) Signal Intercom Alerting Mode Programmable Doorphone Dial Call Pickup Group Assignment Account Code Input Mode Delayed Ringing Assignment Delayed Ringing Count Selection DSS Console Assignment Hold Time Reminder Hold Recall Time Set Programmable External Paging Access Tone DTMF Receiver Programmable Toll Prefix Programmable Secret Speed Dial Programmable Directory Assistance DSS Button Mode Transfer Recall Time M3/FWD Selection

- B. Station Program Clear:
- 1 Dial (98).
 - •"EXT CLEAR" will be displayed.
- 2 Press the NEXT button.
 - •"ALL CLEAR?" will be displayed.
- 3 Press the MEMORY button to clear the system.
- 4 To exit from station clear, press the END button.

The following features are preset as the default data.

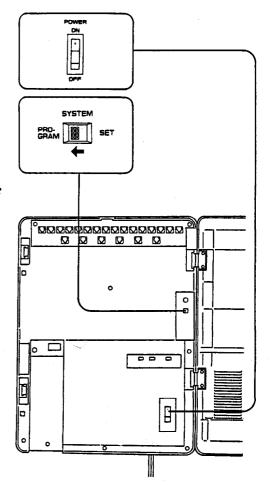
One Touch Dialing
Background Music
Call Forwarding
Data Line Security
Dial Call Pickup Deny
Do not Disturb
Auto CO Hunting
Pickup dial
Flexible CO Button
Flexible DSS Button

Example of Programming

- 1. Turn the Power Switch to ON
- - Be sure the handset of extension 11 is in the cradle and the speakerphone button off.
- 3. To program automatic line access number 9 and the phone number 987-654-3210 speed access code 00.

		at extension 11 st be a KX-T61630.)
1.	Dial (01) or press the AUTO button.	Display SPEED DIALING
2.	Press the NEXT button.	ENTER SPEED CODE
3.	Dial (00) or press the NEXT button.	●If nothing is stored in access code "00", 00: NOT STORED ●If already stored the automatic line access number 9 and the phone number 123-456-7890, 00: -123-456-7890
4.	① Dial "9". ② Press "—" button. ③ Dial "987". ④ Press "—" button. ⑤ Dial "654". ⑥ Press "—" button. ⑦ Dial "3210".	00: -987-654-3210
5.	Press the MEMORY button.	00: -987-654-3210
6.	 To program the next acceputton. To program a desired accepted acce	ess code, press the
7.	Repeat step 4 to 6.	
8.	To return to the initial program mode, press the END button.	ENTER PGM CODE

- 4. Return the System Program Switch to SET
- To make program change, start from the beginning.



While programming if a mistake is made,

- 1. Press the "END" button.
- 2. Start programming procedure from the beginning.
- •You will hear a beep after pressing the MEMORY button.
- •The MEMORY indicator light will go on when the MEMORY button is pressed, and then the Indicator light will go out when the NEXT or PREV button is pressed.

■ PROGRAMMING TABLE

TO SET	PROGRAM ADDRESS	ST	EPS REQU	IRED T	O CHAN	IGE PRO	GRAM		
Date and Time Setting	[00]	[NEXT] [A] [♣] [SELI L. year	ECT] [\$] [B] [\$] month day			D] (\$) [SELE			
System Speed Dialing Entry	[01] or [AUTO]	L [81	[SELECT] one number] [ME : automatic line a 1] through [86]: a ccess code [00 th	iccess numb utside line a	er	er			
DSS Console Assignment	[02]	1		Telepho ole 2 extensi nsion numb	ne extension on number	1 number pair	ed with cons	cole 2	
			Console 1		elenkone najre	ed with console I	, 		
		Extension number	Console		егерноне раст	u wun console l			
		Extension number	Console 2	To	elephone paire	ed with console 2			
CO Connection Assignment	[03]	[NEXT] [NEXT] [SEL	ECT] [MEMORY CONNEC	T/NO CON	NECT appears				
			Default		·, · · · · · · · · · · · · · · · · · ·		gram change		
		CO (s) Connect	all CO's	I	2	3	4	5	6
		No connect							
Dial Mode (Tone/ Pulse) Selection	[04]	[NEXT] [NEXT] [SELI	ECT] [MEMORY] TONE/PUI mil the desired C	LSE	ppears				
			Default			To make pro	gram change		
		CO (s) Tone (DTMF) mode	all CO's	1	2	3	4	5	6
		Pulse mode							
Switching Mode (Day/Night Service)	[05]	[NEXT] [SELECT] [MI	EMORY] [END] AN/AUTO						A SECTION AND A SECTION AND ASSESSMENT AND ASSESSMENT A
			Default	To	make progra	m change			
		Manual Automatic	×						
Starting Time (Day/Night Service)	[06]	;	S] [SELECT] [ME inute AM ime for day service	PM		[D][\$][SELE minute tarting time fo	AM/P	M	
			Default	T	o make progra	m change			
		Day Plan Night plan	9:00 AM 5:00 PM						

TO SET	PROGRAM ADDRESS		STEPS	S RI	EQU	JIR	ED	TO	CH.	AN	GE	PR	0GI	RA A	M					
Flexible Day Outward Dialing	[07]	[NEXT] [NEX	T] [CE] [MEI			۱D]										•		·		
Assignment			CO			sion	numh	er ai	nnear	7										
			Default							To ma	ke pro	oram	chane	,				•		
		Extensions	all extensions	11	12	13	14	15	16	17	18	19	20	21	22	23	24	2.	5	26
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		CO2	×																\Box	
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Fl. 'H. N'. I.				<u> </u>	<u> </u>			-			•			•						
Flexible Night Outward Dialing Assignment	[08]		T] [CE] [MEI L (until the desi	CO ni	ımber	•	unbei	app	oears											
			Default							To ma	ke pro	gram	change							
		Extensions	all extensions	11	12	13	14	15	16	17	18	19	20	21	22	23	24	2.	5	26
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		CO 2	. ×				-		-	 		ļ		_		-	-	+	+	
		CO 3	×					_	+	-		-			\vdash	-	╅╾	+-	+	
		CO 5	×				-	-	+-	+-		_	<u> </u>		 	+-	+-		十	
	•	CO 6	×			-														
Flexible Day				_								-								
Ringing Assignment	[09]	- 	T) [CE] [MEI L C until the desi	O ni	ımber	•	umbei	арр	ears					•						
			D.C.							To ma	l		- 1							\neg
		Extensions	Default all extensions	11	12	13	14	15	16	10 ma	18	19	20	21	22	23	24	2	5.	26
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		CO2	×																\Box	
		CO3	×						↓	 		<u> </u>	Щ.		<u> </u>	<u> </u>	_	_	_	
		CO 4	×	·			-		-	 		<u> </u>	├		├		+-	+	-	
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Flexible Night Ringing Assignment	[10]		T] [CE] [MEI CO until the de	numi	ber		numl	oer a	ppear	s										
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		Extensions	all extensions	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1 2	5	26
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		CO 3	×	 	-	_	+-	1	+	+	\vdash		\vdash	 	\vdash	+	+	+	\dashv	
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		CO 6	×		<u> </u>				$oldsymbol{ol}}}}}}}}}}}}}}}}}$			<u>L</u>	1		<u> </u>	ل				
Toll Restriction—																				
Class Assignment		↓ ↓																		
	[11]	[NEXT] [NEX	T] [SELECT] [I				D]										•			
			<i></i>																	
		<u> </u>	until the				on nu	mbe	r appe	ars										
·)efault	\rightarrow		<u> </u>	3 1	1			progra			1 22	22	2.1	31	126
		Extensions Class 1 (all ca	.// _n)	ali e	xtensi	ons	11 1	2 1	3 14	15	16	17	8 19	20	21	22	23	24	25	26
			alls, local calls)	╁	×	-	-	+		+	-	-+	+-	+-	+	-	-			\vdash
			ted area-codes,	 				+	+	+	+	+	- -	+-	+	\vdash		\dashv		H
		local calls) Class 4 (local		_		_	+	+	-			-	-	+	 					

	TO SET	PROGRAM ADDRESS		STE	PS F	REQ	UIF	REL	TO) CI	HA!	VGE	PR	00	RA	M				
	Toll Restriction— Area Code Selection	[12]	F(SELE	MEMOR irea cod	e with .	3 digit			* - ''			·								
				T						M	emory	locatio	n num	ber	-					
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			Area code entry																\dagger	
	Programmable Tall Prefix	[13]	[NEXT] [SELECT] With 1 Without 1	[MEMC					То	make	progr	am che	inge							
	Dung and the		wunout 1																	
	Programmable Operator Call	[14]		until the	ENA.	BLE	DISA	BLE	, ber ap											
				Pefault extensions	s 11	12	13	14	15	16	To ma	ke pro	g ram c	hange 20	21	22	2.3	24	25	26
			Enable Disable	×		12	13	14	15	10	17	10	17	20	21	22	2.3	24	23	20
·	Programmable Directory Assistance	[15]	[NEXT] [SELECT]	(MEMO				ESTR		make	progr	am ch	ange							
			No restrict Restrict			×														
	Automatic Answering (Automatic/ Manual) Selection	[16]	[NEXT] [NEXT] [SE	L L	AUT	OAN	SWE	R/M/												
				efault									ram cl							
			Extensions all ex	tensions ×	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
			Manual																_	
	Host PBX Access Codes Assignment	[17]		D) [Mi	up to	four o esired	utside CO i	numb		pear	S		naxim	um c	of 2 d	igits				
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			5																	
L			6																	

TO SET	PROGRAM ADDRESS		STE	PS I	REQ	<i>QUL</i>	REI) To	0 C.	HA!	VGI	E PI	ROC	GRA	M				
Preferred CO Line Assignment	[18]	[NEXT] [NEX							100	2/60	400	510	~ <i>_</i>						
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			Default		1 10		1 7.4	1 15		To ma		``			1 22	1 22	24	26	- 36
		Extensions • • • • (none)	all extensions	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
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		CO 2		-				-	 	†		 	\vdash	† —	 	 			\neg
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Programmable																	•		
Call Waiting	[19]	[NEXT] [NEX																	
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		Extensions			xtensi	ons .	11 1.	2 13	14	15			8 19		21	22 2	23 24	25	26
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		EXTON, Co	O-ON					<u> </u>	<u> </u>				<u> </u>		<u> </u>				<u></u>
Delayed Ringing	[20]	[NEXT] [NEXT	Γ] [AF] [MEN	MOR'	Y] [EN	ND]													
Assignment				di	al the	CO													
			until the de	sired	exten	sion	numb	er ap											
		Futuraiana	Default		12	12	14	15		To ma	ke pro 18	gram 19		21	22	23	24	25	26
		Extensions • • • (none)	all extensions	11	12	13	14	13	16	1/	10	19	20	21	122	23	27	2.5	20
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Delayed Ringing	[21]	[NEXT][SELE	CT][MEMOR	Y][E	ND]														
Count Selection		i	AFTE.	RIR	ING	AFT	ER 2	RIN	GS/A	FTEF	3 R	INGS	AFI	ER 4	1 RIN	GS			
				efault						ogram (1					
		After 1 ring		7					, p					1					
		After 2 rings		×															
		After 3 rings																	
		After 4 rings				İ								<u> </u>					
Intercom Alerting	[22]	[NEXT] [NEX	DISELECTION	MEM	ORYI	[ENI													
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			Default						-	To ma	ke pro	gram (change						
		Extensions	all extensions	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		Tone call	×																
	-	Voice call		<u> </u>	<u> </u>					<u> </u>							<u> </u>		
Programmable	1001	MEVEL	דו ומבו במדייו	MENA) ODV	IEN!	21												
Doorphone	[23]	[NEXT] [NEX						- (da	m., 16.	a zina	mal								
			D-P until the de							ringi	ng)								
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	[Extensions Doorphone 1	all extensions	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		Doorphone 2	×					_	 			-					<u> </u>		
		Deny the		 	\vdash	 	 								 	1			
	1	ringing																	

TO SET	PROGRAM ADDRESS		STE	EPS R	EQ	UIF	RED	TO	CF.	IAN	GE	PR	0G	RA.	M				
Dial Call Pickup Group Assignment	[24]	[NEXT] [NEXT	[AD] [N	dial the	pick.	up gr													
			Default		1 -		,		,			gram c							
		Extensions Pickup	all extension	ns 11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		Group 1	×		ŀ														
		Pickup Group 2																	
,		Pickup Group 3																	
		Pickup Group 4																	
Account Code Input Mode	[25]	[NEXT] [NEX	until the	OPTI	ON/F	ORC	ED	er ap											
		Extensions	Default	77	T 72	12	111	7.5		·	_	gram c			22	22	24 1	25	26
		Extensions Option	all extensio	ns 11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
		Forced							 										
Duration Time Count Start Mode	[26]	[NEXT] [SELE	CT] [MEM	NTLY/	5S A I	FTER	R DIA							· · · · · ·					
		Instantly		Dej	fault	-		Ton	nake p	rogran	n char	ige							
		5S after dial			×														
SMDR	· · · · · · · · · · · · · · · · · · ·	(Carriage retu	rn for a na	u lina)															—
Communication Parameters	[27]	[NEXT][SELE		RY]															
		GD, LD		Default	<u>'</u>			To ma	ke pro	gram c	hang	!							
		CR+LF CR		×	-														
		(Baud rate) [NEXT][SELE	CT][MEMC 110B/		00B/66	00B/1	200B		B/480 50B	00B/96		600B	12	00B	2400	OR	4800B	96	600B
		Default									\dashv		+	x	2.00		10002	1,4	
		To make progre	am change							l			T_						
		(Word length) [NEXT][SELE			s														
				Default				To ma	ke pro	gram c	hange	,							
		7 BITS 8 BITS		×	···········														
		(Parity) [NEXT][SELE			YCD 4	CEU		"05											
		1_	NONE	MARK															
]	l	Default				None		ark	Spa	ce	Even	10	dd						
		Default To make progra	m chanas		-		+	×				+							
	ŀ										-								

TO SET	PROGRAM ADDRESS	S	TEPS REQ	UIRED TO C	CHANGE PRO	OGRAM	
SMDR						· · · · · · · · · · · · · · · · · · ·	
Communication		(Stop bit length)					
Parameters		[NEXT][SELECT][MEI	MORY]				
		1 B					
			Default	To make	program change		
		1 BIT	×	, o			
		2 BITS					
		(Page length)					
N							
``		[NEXT][AB][MEMORY					
		4 th	rough 99 lines				
			Default	To make			
		Lines per page	66	1 о таке ј	orogram change		
							
·		(Skip perforation)					
		[NEXT][AB][MEMORY][END]				
		0 th	rough 95 lines			•	
							
		China in a line	Default	To make j	program change		
		Skipping lines	0		·		
System Data		•SYSTEM PARA					
Dump		•SPEED DIAL					
		•ALL PARA					
		•STOP OUTPUT					
		-5101 001101					
	[28]	[NEXT][SELECT][MEN	ORYIENDI				
	()	[
		<u> </u>		PARAICO PARA RAISTOP OUTPU	JEXT PARAISPEI IT	ED DIAL	
		-CO DADA					
		●CO PARA					
		[NEXT][SELECT][MEN					
I		[LACK LIGHTED LIGHT	NORYJENDJ				
		[MEXT][OCCOT][MCI	T				
			T di	al CO number			
			T	al CO number			•
			T di	al CO number			
		•EXT PARA	L die Lihe CO PARA	al CO number appears			
		unti	dithe CO PARA	al CO number appears			
		•EXT PARA	dithe CO PARA	al CO number appears	er		
		• EXT PARA [NEXT][SELECT][MEN	dithe CO PARA	al CO number appears)] ial extension numb	er		
SMDP Incoming		• EXT PARA [NEXT][SELECT][MEN	I the CO PARA of	al CO number appears)] ial extension numb	er	· .	
SMDR Incoming/ Outgoing Selection	[29]	• EXT PARA [NEXT][SELECT][MEN	I the CO PARA of the CO PARA	al CO number appears o] ial extension numb			
	[29]	• EXT PARA [NEXT][SELECT][MEN until	MORY][AB][END	al CO number appears ial extension numb appears ELECT][MEMOR	Y][END]		
SMDR Incoming/ Outgoing Selection	[29]	• EXT PARA [NEXT][SELECT][MEN until	MORY][AB][END	al CO number appears o] ial extension numb	Y][END]		
	[29]	• EXT PARA [NEXT][SELECT][MEN until	MORY][AB][END	al CO number appears ial extension numb appears ELECT][MEMOR	Y][END]		
	[29]	• EXT PARA [NEXT][SELECT][MEN until	MORY][AB][END	al CO number appears ial extension numb appears ELECT [MEMOR	Y][END] ING: ON/OFF		
	[29]	• EXT PARA [NEXT][SELECT][MEN until	MORY][AB][END	al CO number appears ial extension numb appears ELECT [MEMOR	Y][END] ING: ON/OFF Incoming		

TO SET	PROGRAM ADDRESS	S	ΓEPS	REQU	IIRED	TO CHA	ANGE	PROGI	RAM		
Hold Time	[30]	[NEXT] [SELECT] [I	MEMOF	RY] [END]	-						
Reminder		<u> </u>	I MIN/2	2 MIN	./9 MIN						
						minute			ר		
					2 3		6 7	8 9	1		
		Default			×				1		
		To make progran	n change						1		
Hold Recall Time	[31]	[NEXT] [SELECT] [I	MEMOI	RYIENDI		** · · · · · · · · · · · · · · · · · ·					₹" '
Set		· —				MIN/DISAE	BLE				
				30 seconds	Τ	1 minute			ר		
					1 minute	30 seconds	2 minutes	disable			
		Default		×	 						
		To make program cha	mge	<u> </u>	<u> </u>				J		
Programmable	[32]	[NEXT] [SELECT] [N	/EMOF	RY] [END]							
External Paging				LE/DISA	BLE						
Access Tone			T 7	afault.	Т	T			ר		
		Enable	— <u>—</u>	efault ×	 -	To make prop	ram change		-		
		Disable							1		
Programmable										<u> </u>	
secret Speed Dial	[33]	[NEXT] [SELECT] [N		RYJ (END) <i>ET! SECR</i>	FT						
		7.0	- JECK	· · · · · · · · · · · · · · · · · · ·					7		
	1	No secret		Defai ×	ill	To make	program cho	inge	4		
		Secret		<u>^</u>		·			1		
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	[34]		·30	MEMORY] 00 MS/600 lesired CO	MS/900						
			D.	efault			To mai	ke program	change		
	!!!	CO(s)	all	l CO's	1	2	3		4.	5	6
		300 msec									
					1						
		600 msec		×							
		600 msec 900 msec		×							
Disconnect Time				×							
Disconnect Time		900 msec									
Disconnect Time	[35]			MEMORY							
Disconnect Time	[35]	900 msec [NEXT] [NEXT] [SEL	1.	MEMORY)	O SEC						
Disconnect Time	[35]	900 msec [NEXT] [NEXT] [SEL	1.	MEMORY	O SEC	pears					
Disconnect Time	[35]	900 msec [NEXT] [NEXT] [SEL	the desi	MEMORY)	O SEC	pears	To mak	e program	change		
Disconnect Time	[35]	[NEXT] [NEXT] [SEL	the desi De	MEMORY .5 SEC/4.0 ired CO nu efault CO's	O SEC	pears 2	To mak	e program	change 4	5	6
Disconnect Time	[35]	[NEXT] [NEXT] [SEL	the desi De	MEMORY 5 SEC/4.0 ired CO nu	0 SEC umber app			e program o		5	6
Disconnect Time	[35]	[NEXT] [NEXT] [SEL	the desi De	MEMORY .5 SEC/4.0 ired CO nu efault CO's	0 SEC umber app			e program o		5	6
	[35]	[NEXT] [NEXT] [SEL	the desi De	MEMORY .5 SEC/4.0 ired CO nu efault CO's	0 SEC umber app			e program		5	6
Calling Party		[NEXT] [NEXT] [SEL - until CO(s) 1.5 sec 4.0 sec	the desi	MEMORY .5 SEC/4.0 ired CO nu efault CO's ×	9 SEC umber app			e program		5	6
	[35]	[NEXT] [NEXT] [SEL until unt	the desi De all	MEMORY] .5 SEC/4.0 ired CO nu efault CO's ×	O SEC umber app	2		e program		5	6
Calling Party Control (CPC)		[NEXT] [NEXT] [SEL until	the desi De all	MEMORY] .5 SEC/4.0 ired CO nu efault CO's × MEMORY]	O SEC umber app 1 [END]	2 		e program		5	6
Calling Party Control (CPC)		[NEXT] [NEXT] [SEL until	the desi	MEMORY] .5 SEC/4.0 ired CO nu efault CO's × MEMORY] ENABLE/ ired CO nu	O SEC umber app 1 [END]	2 	3		4	5	6
Calling Party Control (CPC)		[NEXT] [NEXT] [SEL until	the desi De all ECT] [N the desi	MEMORY .5 SEC/4.0 ired CO nu efault CO's × MEMORY ENABLE/ ired CO nu efault	O SEC umber app	E pears	To mak	e program	4 change		
Calling Party Control (CPC)		[NEXT] [NEXT] [SEL until CO(s)	the desi De all ECT] [N the desi	MEMORY .5 SEC/4.0 ired CO nu efault CO's X MEMORY ENABLE/ ired CO nu efault CO's	O SEC umber app 1 [END]	2 	3		4	5	6
Calling Party Control (CPC)		[NEXT] [NEXT] [SEL until	the desi De all ECT] [N the desi	MEMORY .5 SEC/4.0 ired CO nu efault CO's × MEMORY ENABLE/ ired CO nu efault	O SEC umber app	E pears	To mak		4 change		

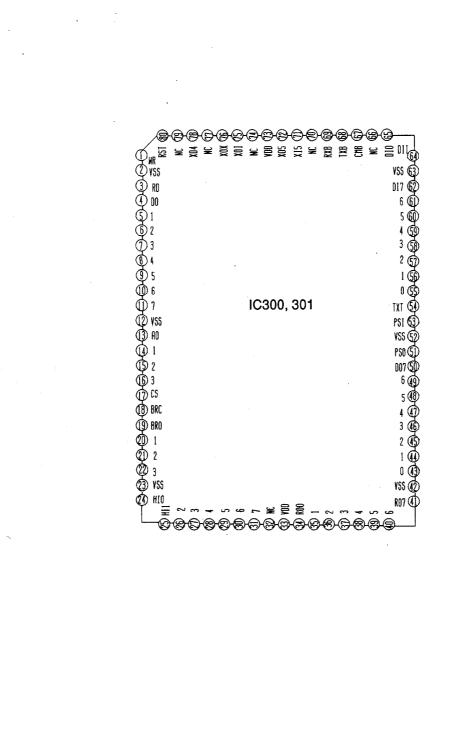
TO SET	PROGRAM ADDRESS	ST	EPS	RE	QU	IRE	ED T	0	C H A	1NC	GE I	PRO	GR	AM	7			
DSS Button Mode	[37]	[NEXT] [SELECT] [MEMO	ORY] [I	END]	4NSF	ER/V	VITH	TRA	NSF	ER								
		Without transfer With transfer		Defa ×			Т	o mak	e prog	ram ch	ange							
DTMF Receiver Check	[38]	[NEXT] [SELECT] [MEMO	LE/DIS	SABI	ĿΕ	ears	· · · · · ·							<u></u>				
٠,				Defau	lt	Т	To	make	progra	ım cha	nge							
,		DTMF receiver		1, 2							2							
		Enable Disable	 -	×		┼			-	-								
Time		30 sec 15 sec		Defa ×	ult		Te	make	progr	am ch	ange							
M3/FWD Selection	[40]	[NEXT][NEXT][SELECT][until the details to Default	FEATU	JRE	KEY/			ars										
		Extensions all extensions	5 11	12	13	14	15	16	17	ke pro	19	20	21	22	23	24	25	20
		Feature key × FWD/DND key	-															
-	[98]	[NEXT][MEMORY][END]		<u> </u>			<u> </u>	L		<u> </u>	<u> </u>	<u></u>	<u> </u>					
Station Program Clear																		

IC I/O DATA

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	MX.			1	23
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70	ł i			P10 	
	AQB			-	31
_4				-	32
15	vss			i	33
_29	1			i	34
40	li			- i	35
54	l i			P16	36
65	ļ į			P20	38
79	ļi			- 1	39
90	VSS			i i	41
	100			1	42
27	P07			1	43.
37	P17			1	44
				1	45
93	-			P26	47
94	P80			P30	48
				1	49
95 96	l i			-	50
97	1 1			i	51
96	l i			i i	52
99	i i			i	55
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100	P87			P40	57
			C508	- 1	58
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10				P46	63
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	P47 P27 P37				91 92

Port	Pin No.	1/0	Signal Name	Ligh Imp	Light and	Lawleyd	I Daniel I
POO	20	0	SH1: CO Amp Shunt Control	High Imp. Non Shunt	High Level Non Shunt	Low Level Shunt	Remarks
P01	21	ō	MT1: CO Amp Mute Contol	Mute	Mute	Non Mute	
P02	22	ō	HD1: CO Amp Hold Tone Control	Non Transmission	Non Transmission	Transmission	
P03	23	0	CF1: CO Amp Conference	Non Conference	Non Conference	Conference	
P04	24	0	DL1: Line Close, Dial Transmission	Break	Break	Make	
P05	25	0	DS1: Spark Erase Relay Control	Break	Break	Make	(RSVD)
P06	26	-	BELL1: Bell, CPC Input		No Bell, Line Break	Bell, Line Make	T(TOVD)
P07	27	T	SID: DTMF Signal Detection 1				
P10	30	0	SH2: CO Amp Shunt Control	Non Shunt	Non Shunt	Shunt	
P11	31	0	MT2: CO Amp Mute Contol	Mute	Mute	Non Mute	
P12	322	0	HD2: CO Amp Hold Tone Control	Non Transmission	Non Transmission	Transmission	
P13	33	0	CF2: CO Amp Conference	Non Conference	Non Conference	Conference	
P14	34	0	DL2: Line Close, Dial Transmission	Break	Break	Make	
P15	35	0	DS2: Spark Erase Relay Control	Break	Break	Make	(RSVD)
P16	36	1	BELL2: Bell, CPC Input		No Bell, Line Break	Bell, Line Make	<u> </u>
P17	37		SID: DTMF Signal Detection 2				
P20	38	0	SH3: CO Amp Shunt Control	Non Shunt	Non Shunt	Shunt	
P21	39	0	MT3: CO Amp Mute Contol	Mute	Mute	Non Mute	
P22	41	ò	HD3: CO Amp Hold Tone Control	Non Transmission	Non Transmission	Transmission	
P23	42	0	CF3: CO Amp Conference	Non Conference	Non Conference	Conference	
P24 P25	43	0	DL3: Line Close, Dial Transmission	Break	Break	Make	
P25	44 45	0	DS3: Spark Erase Relay Control	Break	Break	Make	(RSVD)
P27	45		BELL3: Bell, CPC Input		No Bell, Break	Bell, Make	
P30	46	0	DAY: Day Mode LED Control	Lights-out	Lights-out	Lighting	
P31	48	Š	SH4: CO Amp Shunt Control	Non Shunt	Non Shunt	Shunt	
P32	49	0	MT4: CO Amp Mute Contol	Mute	Mute	Non Mute	
P33	50	0	HD4: CO Amp Hold Tone Control CF4: CO Amp Conference	Non Transmission	Non Transmission	Transmission	ļ
P34	51	0	DL4: Line Close, Dial Transmission	Non Conference	Non Conference	Conference	
P35	52	ö	DS4: Spark Erase Relay Control	Break	Break	Make	(50) 5
P36	55	Ť	BELL4: Bell, CPC Input	Break	Break	Make	(RSVD)
P37	56		NIGHT: Night Mode LED Control	Lights-out	No Bell, Line Break	Bell, Line Make	
P40	57	ō	SH5: CO Amp Shunt Control	Non Shunt	Lights-out Non Shunt	Lighting Shunt	<u> </u>
P41	58	ō	MT5: CO Amp Mute Contol	Mute	Mute	Non Mute	-
P42	59		HD5: CO Amp Hold Tone Control	Non Transmission	Non Transmission	Transmission	
P43	60	0	CF5: CO Amp Conference	Non Conference	Non Conference	Conference	
P44	61	0	DL5: Line Close, Dial Transmission	Break	Break	Make	
P45	62	0	DS5: Spark Erase Relay Control	Break	Break	Make	(RSVD)
P46	ස		BELL5: Bell, CPC Input		No Bell, Line Break	Bell, Line Make	(novu)
P47	64	0	PD RLY: Power Failure Control	Break	Break	Make	
P50	66	0	SH6: CO Amp Shunt Control	Non Shunt	Non Shunt	Shunt	†
P51	67	0	MT6 CO Amp Mute Contol	Mute	Mute	Non Mute	
P52	68	0	HD6: CO Amp Hold Tone Control	Non Transmission		Transmission	
P53	69	0	CF6: CO Amp Conference	Non Conference	Non Conference	Conference	
P54	70	0	DL6: Line Close, Dial Transmission	Break	Break	Make	1
P55	71		DS6: Spark Erase Relay Control	Break	Break	Make	(RSVD)
P56	72		BELL6: Bell, CPC Input		No Bell, Line Break	Bell, Line Make	1
P57	73		Not Used				
P60	74		TA0: Cross Point Data	Data Low	Data Low	Data High	
P61	75		TA1: Cross Point Data	Data Low	Data Low	Data High	
P62	76		TA2: Cross Point Data	Data Low	Data Low	Data High	1 1
P63	77		TA3: Cross Point Data	Data Low	Data Low	Data High	
P64	78		TA4: Cross Point Data	Data Low	Data Low	Data High	
P65	81		TA5: Cross Point Data	Data Low	Data Low	Data High	
P66 P67	82 83		TA6: Cross Point Data TA7: Cross Point Data	Data Low Data Low	Data Low Data Low	Data High	

Port	Pin No.	1/0	Signal Name	High Imp.	High Level	Low Level	Remarks
P70	84	0	A: Cross Point Address	Address Low	Address Low	Address High	
P71	85	0	B: Cross Point Address	Address Low	Address Low	Address High	
P72	86	0	C: Cross Point Address	Address Low	Address Low	Address High	
P73	87	0	D: Cross Point Address	Address Low	Address Low	Address High	
P74	´ 88	0	STB1: Cross Point Strobe	Strobe Low	Strobe Low	Strobe High	
P75	89	0	STB2: Cross Point Strobe	Strobe Low	Strobe Low	Strobe High	
P76	91	0	STB3: Cross Point Strobe	Strobe Low	Strobe Low	Strobe High	
P77	92	0	STB4: Cross Point Strobe	Strobe Low	Strobe Low	Strobe High	
P80	93	0	ROW1: PB Signal Generator, 1 Line	Uncertainty	High	Low	
P81	94	0	ROW2: PB Signal Generator, 2 Line	Uncertainty	High	Low	
P82	95	0	ROW3: PB Signal Generator, 3 Line	Uncertainty	High	Low	
P83	96	0	ROW4: PB Signal Generator, 4 Line	Uncertainty	High	Low	
P84	97	0	COL1: PB Signal Generator, 1 Row	Uncertainty	High	Low	
P85	98	0	COL2: PB Signal Generator, 2 Row	Uncertainty	High	Low	
P86	99	0	COL3: PB Signal Generator, 3 Row	Uncertainty	High	Low	
P87	100	0	COL4: PB Signal Generator, 4 Row	Uncertainty	High	Low	



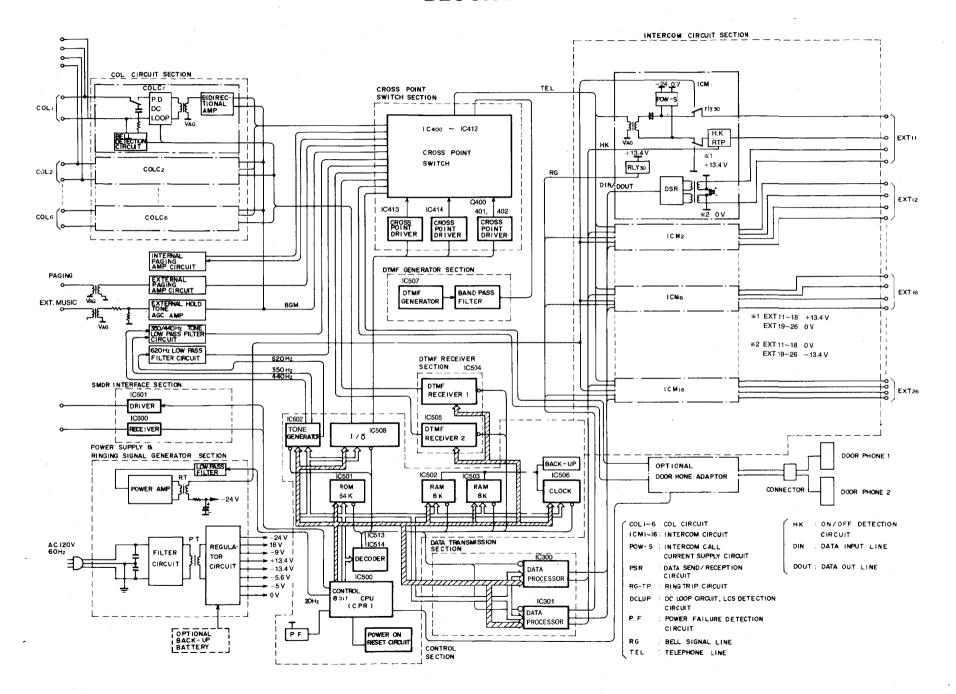
Port	Pin No.	1/0	Signal Name	High Imp.	High Level	Low Level	Remarkes
HIO	24	-	HK11: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HII	25	1	HK12: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
Hi2	26	_	HK13: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI3	27	1	HK14: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI4	28		HK15: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI5	29		HK16: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI6	30	- 1	HK17: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI7	31	l	HK18: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
RC0	34	0	RG11: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RQ1	35	0	RG12: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RO2	36	0	RG13: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RO3	37	0	RG14: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RO4	38	0	RG15: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RO5	39	0	RG16: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RO6	40	0	RG17: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
R07	41	0	RG18: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
D00	43	0	TXD11: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DO1	44	0	TXD12: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DO2	45	0	TXD13: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DO3	46	0	TXD14: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DO4	47	0	TXD15: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DO5	48	0	TXD16: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DO6	49	0	TXD17: EMSS Tel. Data Transmission		Non-Transmission	Transmission	
DO7	50	0	TXD18: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DIO	55	1	RXD11: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI1	56	Π	RXD12: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI2	57	T	RXD13: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI3	58	I	RXD14: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI4	59	1	RXD15: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI5	60		RXD16: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI6	61		RXD17: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI7	62		RXD18: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ

Port	Pin No.	1/0	Signal Name	High Imp.	High Level	Low Level	Remarkes
HIO	24	ï	HK19: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI1	25	i	HK20: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI2	26		HK21: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI3	27	T	HK22: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI4	28	1	HK23: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI5	29	_	HK24: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI6	30	-	HK25: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
HI7	31	1	HK26: EXT. Telephone Hook Detection		On-Hook	Off-Hook	Pull-up by 2.2kΩ
RO0	34	0	RG19: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	
RO1	35	0	RG20: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RO2	36	0	RG21: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RC3	37	0	RG22: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	
RO4	38	0	RG23: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
RO5	39	0	RG24: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	
RC6	40	0	RG25: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	
R07	41	0	RG26: Extension Ring Relay Control	Bell Transmission	Bell Transmission	Non-Bell Trans	mission
D00	43	0	TXD19: EMSS Tel. Data Transmission	Non-Transmission		Transmission	
DO1	44	0	TXD20: EMSS Tel. Data Transmission	Non-Transmission	Non-Transmission	Transmission	
DO2	45	0	TXD21: EMSS Tel. Data Transmission	Non-Transmission		Transmission	
DC3	46	0	TXD22: EMSS Tel. Data Transmission	Non-Transmission		Transmission	
DO4	47	0	TXD23: EMSS Tel. Data Transmission	Non-Transmission		Transmission	A
DO5	48	0	TXD24: EMSS Tel. Data Transmission	Non-Transmission		Transmission	
DO6	49	0	TXD25: EMSS Tel. Data Transmission	Non-Transmission		Transmission	
DO7	50	0	TXD26: EMSS Tel. Data Transmission	Non-Transmission		Transmission	
DIO	55	I	RXD19: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI1	56		RXD20: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI2	57	I	RXD21: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI3	58		RXD22: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI4	59		RXD23: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI5	60		RXD24: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI6	61		RXD25: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ
DI7	62		RXD26: EMSS Tel. Reception Data		Non-Data	Data	Pull-up by 1kΩ

_1	VSS		£	64
_2	XTAL		RD	63
3	EXTAL		₩R	62
4	MPO		R/W	61
_5	PP1		LIR	
_6	RES		88	59
_7	STBY		00	58
8	INN		1	57
9	P20		2	56
10			3	55
11	P22		4	54
12	RX		5	53
13	ΤX		6	52
14	P25		7	51
15	P26		AO	50
16	P27		1	49
17	P50		2	48
18	IRQ2		3	47
19	P52		4	46
20	HALT		5	45
21	P54		6	44
22	P55		7	43
23	P56	10500	VSS	42
24	P57		A8	41
25	P60		9	40
26	l I		10	39
27	i		11	38
28	1		12	37
29	i		13	36
30	1		14	35
31	1		15	34
32	P67		VCC	<u>33</u>

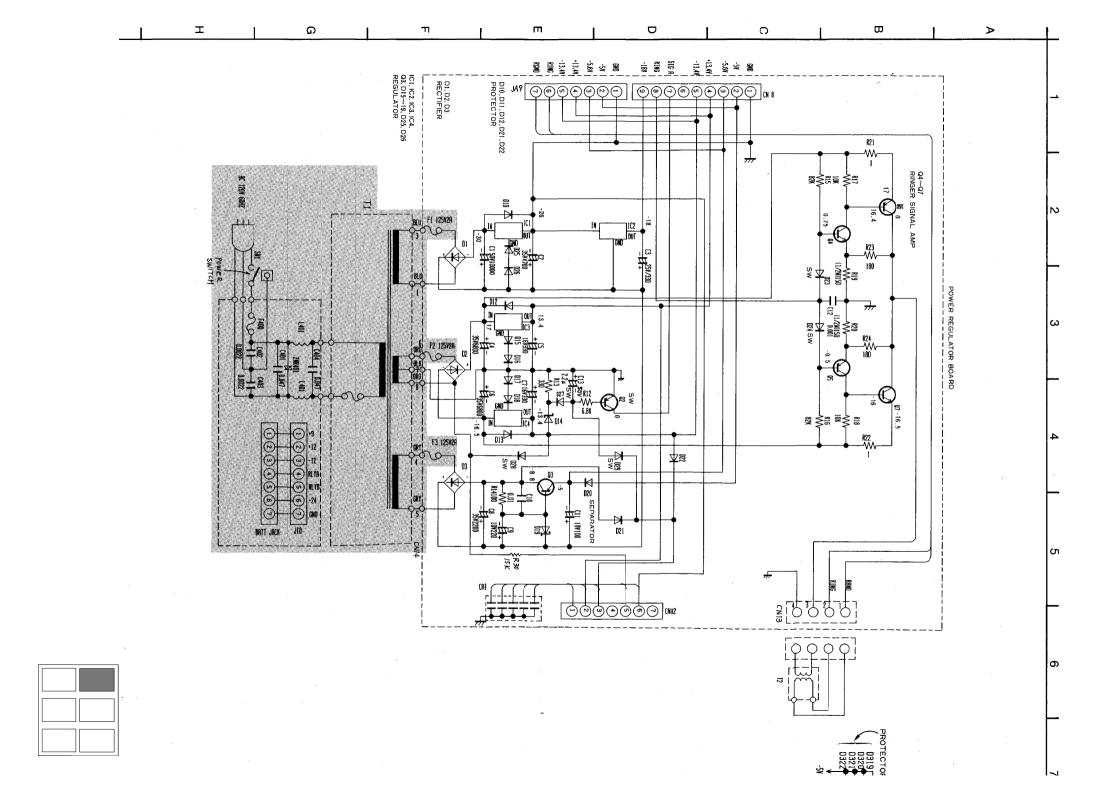
Port	Pin No.	1/0	Signal Name	High Imp.	High Level	Low Level	Remarks
NMI	8	-	CPU Restart				
P20	9	ŀ	OL1: EXT. Over Current Detection (-)		Normal	Over Current	EXT. 19-26
P21	10	_	OL2: EXT. Over Current Detection (+)		Over Current	Normal	EXT. 11-18
P22	11	0	BRK1: EXT. Over Current Protection (-)	Break	Break	CN	EXT. 19-26
PX	12		RXD				
TX	13	0	TXD				
P25	14	0	BRK2: EXT. Over Current Protection (+)	Break	Break	CN	EXT. 11-18
P26	15	0	BUSY1: Doorphone 1 ON/OFF Control	OFF	OFF	ON	
P27	16	0	BUSY2: Doorphone 2 ON/OFF Control	OFF	OFF	CN CN	
P50	17	ı	***************************************				
IRQ2	18	_	PFD: Power Down Detection		Power Down	Normal	
P52	19	_	DROPT: Doorphone Adaptor Connect Detection	Non-Connect	Connect		
HALT	20		HALT: Halt Control Input	Normal	Power Down		
P54	21	_	DHK1: Doorphone 1 Hook Detection	On-Hook	Off-Hook		
P55	22		DHK2: Doorphone 2 Hook Detection	On-Hook	Off-Hook		
P56	23	_	CNCT1: Doorphone 1 Connect Detection	Connect	Non-Connect		
P57	24	_	CNCT2: Doorphone 2 Connect Detection	Connect	Non-Connect		
P60	25						
P61	26	0	BANK: Bank Select Control				
P62	27		CTS				
P63	28						
P64	29	I	DSR				
P65	30		DTR				
P66	31	0	PF: Power Down Control		Power Down	Normal	
P67	32	0	20Hz: Bell Signal Output				

BLOCK DIAGRAM



TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

1		1		
COM OUT PQVITA7924 PQVITA7812AF	1 ₂ ₃ AN7912T	PQVIH63B03XP	7 PQVITC7H04P PQVITC7H08P PQVIHD75188P PQVIHD75189P	PQVINJM4558M
8 Manney 1	9 16 1 8 PQVITD62706P	COM OUT	15 28 b)	64 64 65 65 80 1
PQVITC4066BF	PQVITC7H139P PQVITC7H138P	PQVIPC79M18F	PQVIHM6264LA PQWIT61610M2	PQVI671152F
80 81 81 100 1 30	1 PQVI63HB110	8 5	PQVINJM4558D	18 10 10 10 10 10 10 10 10
	·			PQVIMT8870BC
16 1	PQVILR4089 PQVIBU3140	18 1	E C B	B C E 2SB1015
		PQVIMS6242BS	2SA1626	2SD1406
2SB834 2SC2590	2SA881, 2SB644 2SC2673, 2SD639	E C B	DTA124EA DTA124XA DTA143A DTA144A 2SA937 2SC2021 PQVTDTC114Y	E C B 2SC2878
PQVD2B4B41 PQVD3B4B41	Anode Cathode MA4110	Cathode	1SS131 1SR35-200 MA4030 PQVDHZS2B1 PQVD1SV124	Cathode
Cathode		Anode Cathode	LN220RPH LN320GPH LN420YPH	MA1056 MA4036 MA4047 MA4062 MA4091
PQVDEK03	PQVDS1YB40F1		<u> </u>	



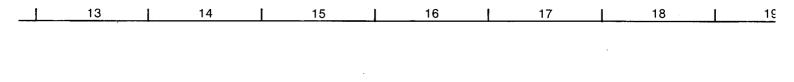
SCHEMATIC DIAGRAM

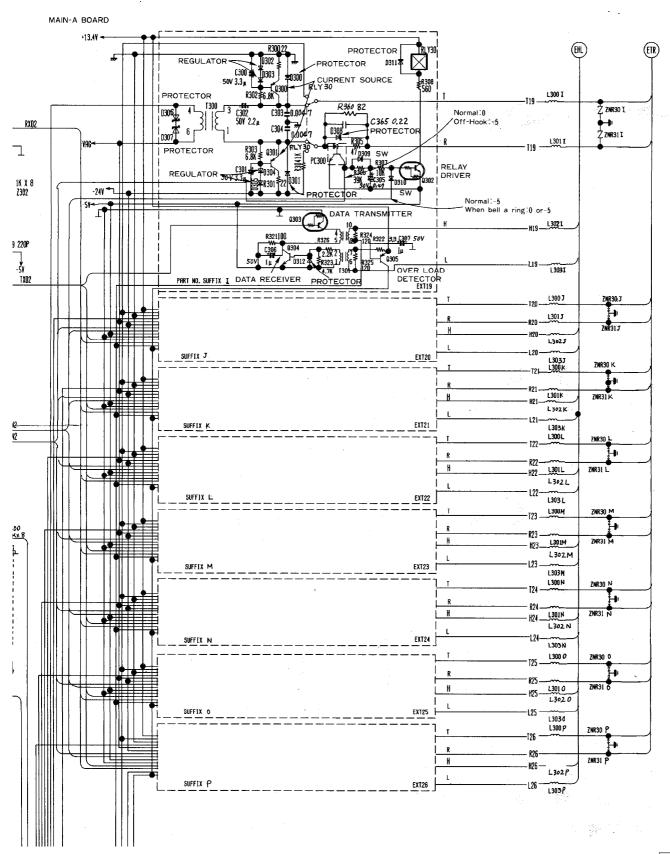
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11

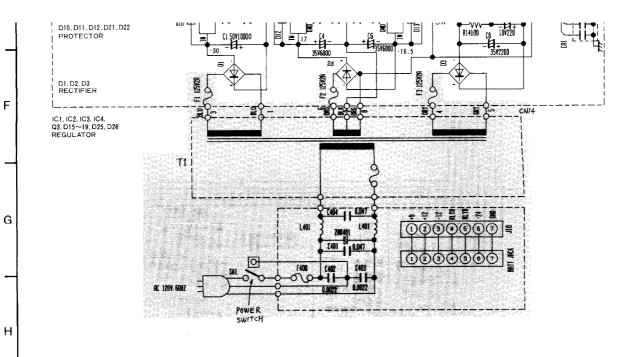
8

-5V ORI OR2 -24V C370 16 V1000 PROTECTOR D319 D D320 D D321 D D322 D -5V V (1) KB (1) RXO2 VSS 🚯 ∯1 1 1 1 1 1 1 1 1 OL2 30 BRK1 (1) -**∳**4 -**∲**5 BRK2 32 IC 301 Q311 9312 EXT 9-16 C309 220P SW BUSY1 (33) BUSY2 30 D315 N DHK1 35 D316 N DHK2 36 D316 N CNCT1 37 D318 N CNCT2 30 D318 N VSS 🗐 DATA PROCESSOR PSO (1) -∰2 -∰3 -∰3 47K × 8 -**(18**) BRC (1) BRC (2) BRO (2) 1 (2) 2 900 1 -2 1 🚯 Ø 3 -Ø ¥SS 3 16 1 47K × 8 1 7204 Bø 0 VSS @ -5V R07 @ -5V Normal:-5 1 (18) 2 (19) 3 20 W-PCM2 100 -w-HKN2 ₩-C310 C311ATP OV IV 6 23 ₩-7 20 ₩. (32 (5) (51 (6) -SY CNN1 W -W-RD (2) ₩. WR (28) R370 WR VSS RD D. 1 2 2 3 4 4 5 5 VSS (G) COITICS 017 COIR 6 CO2T CO2R(2 C03T|① 1C300 CO3R EXT 1 - 8 **CO4T**(8 COAR 6 6 7 YSS 1 2 3 SS 88 8 1 2 3 SS 1 2 S COST TXT (\$\overline{\phi}_{C3|3220P} C05R (9) CO6T (12) VSS 👰 ₹8315 10K COGR (II) DATA PROCESSOR PS0 \$1-5V OR OPT 39 D07 SP PD RLY 🐠 5 🔞 10 3 ∰ -5V (2) -24V ③ -14.24 (5) Off-Hook:-5 ⁻⁵vss ∰ RING (5) R320 C317 35 V100µ C 361 Normal:-5 _R07 **(1**)-









Notes:

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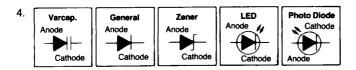
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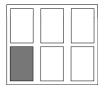
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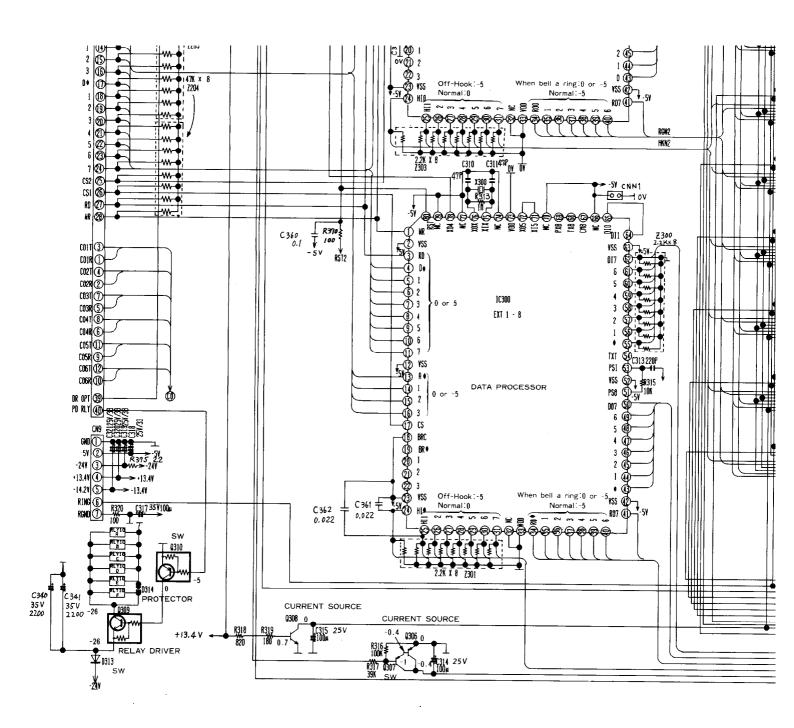
 DC voltage measurements are taken with electronic voltmeter and oscilloscope from ground line.

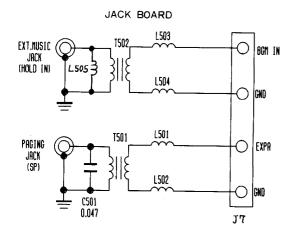
Power Switch ON condition
 Voltage Value: V

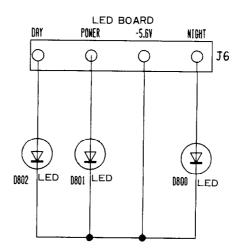
- 2. This schematic diagram may be modified at any time with the development of new technology.
- 3. Important safety notice
 The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.

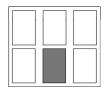


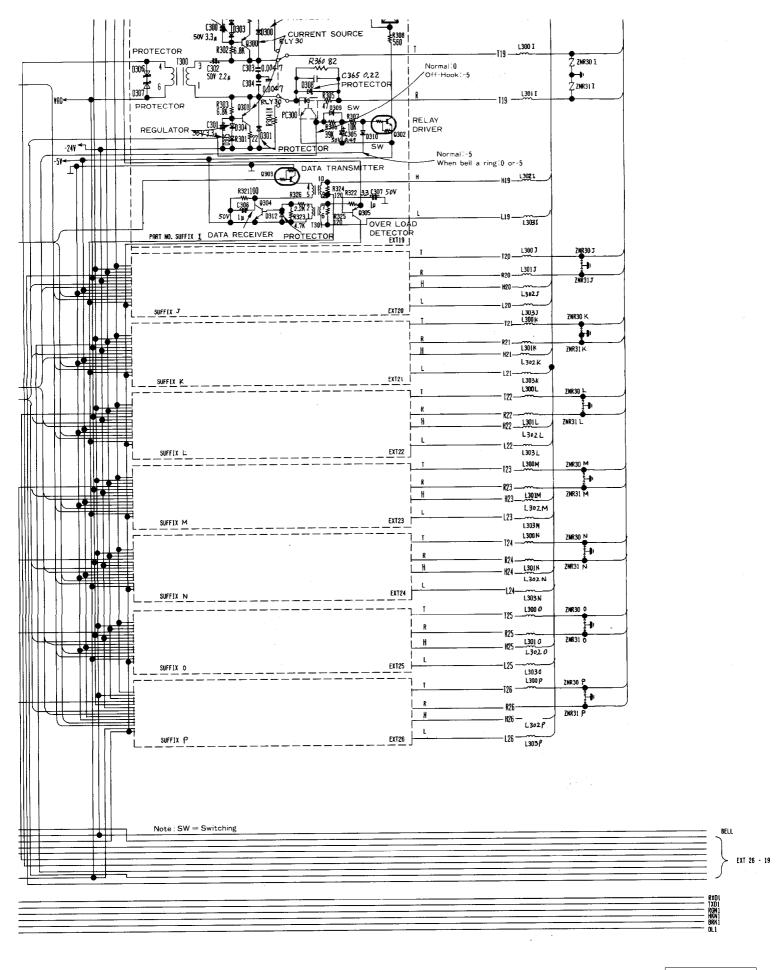




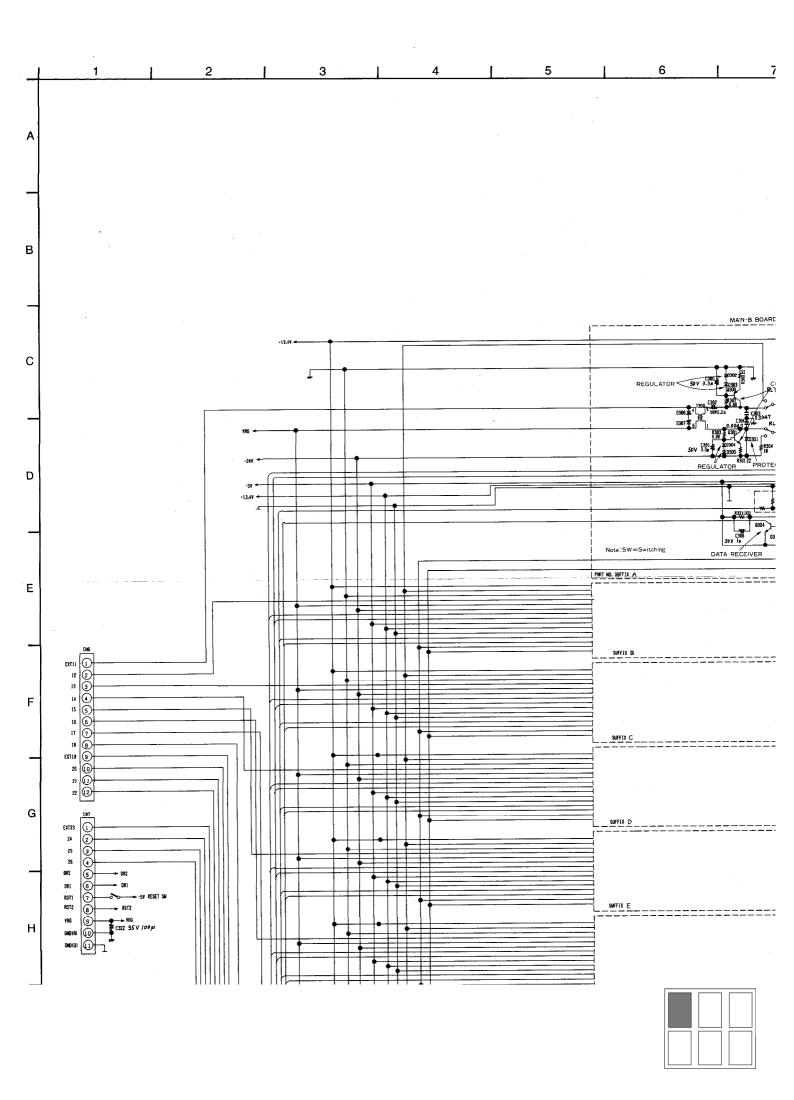




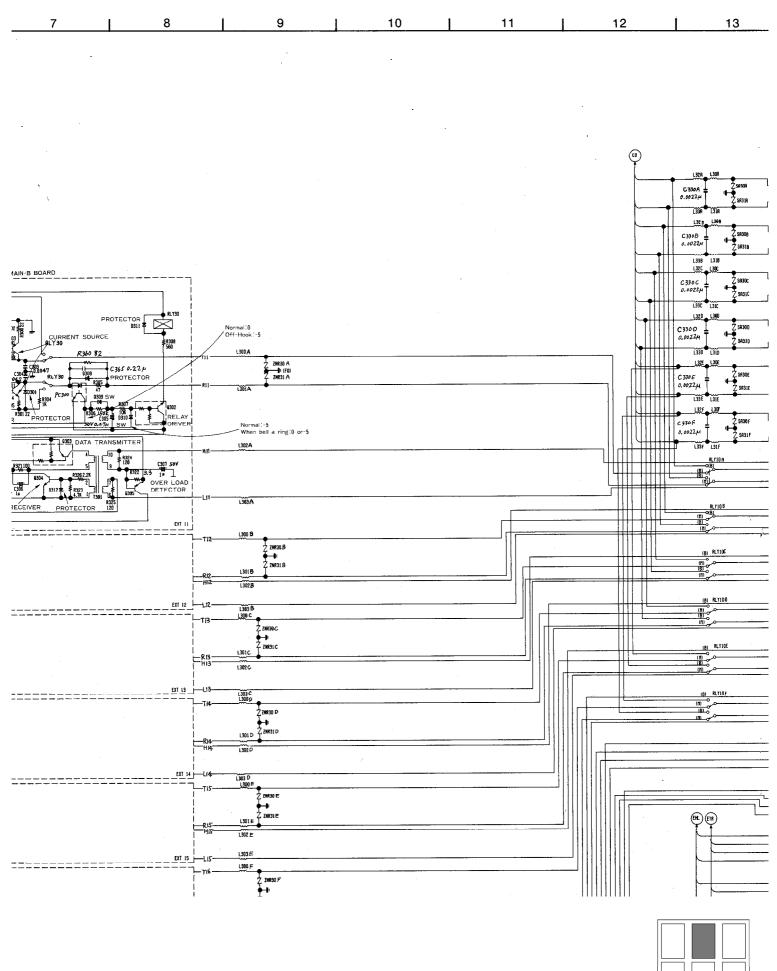




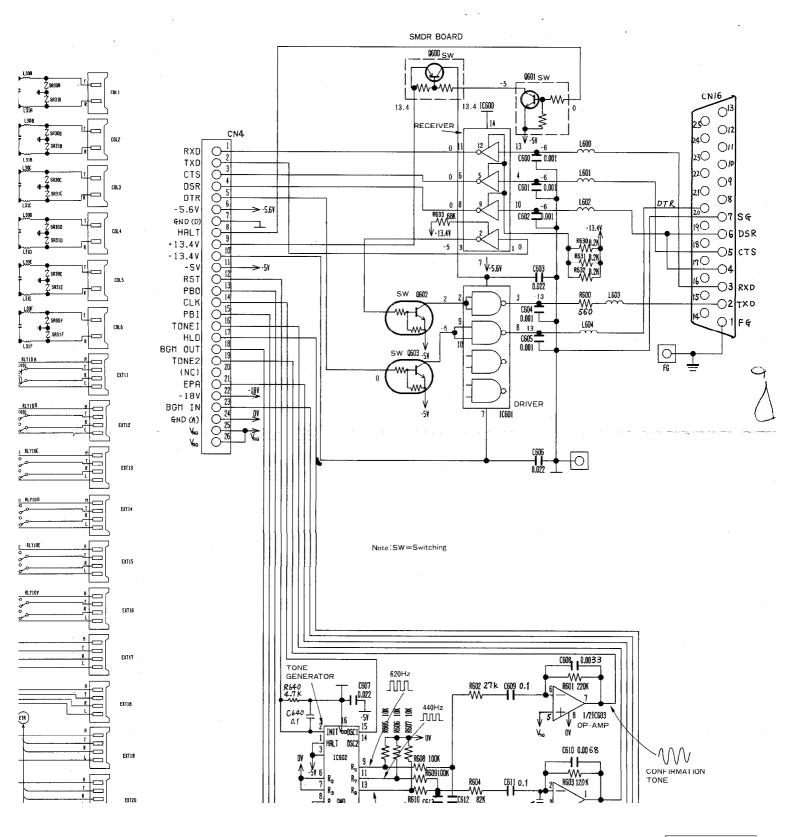




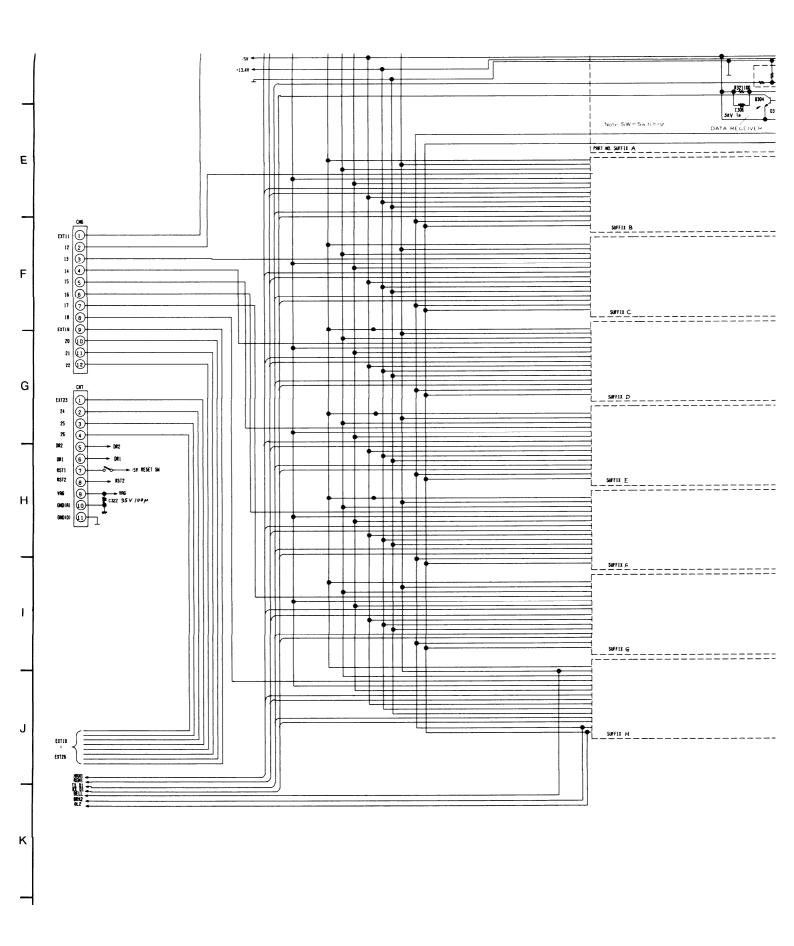
SCHEMATIC DIAGRAM

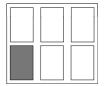


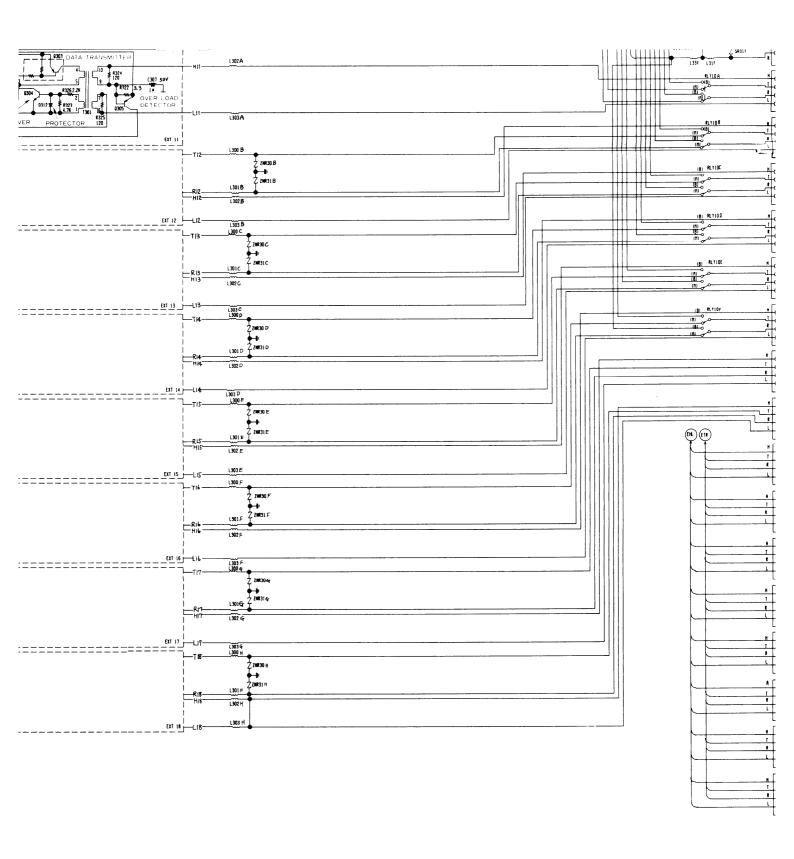
13 | 14 | 15 | 16 | 17 | 18 | 19

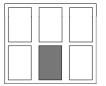


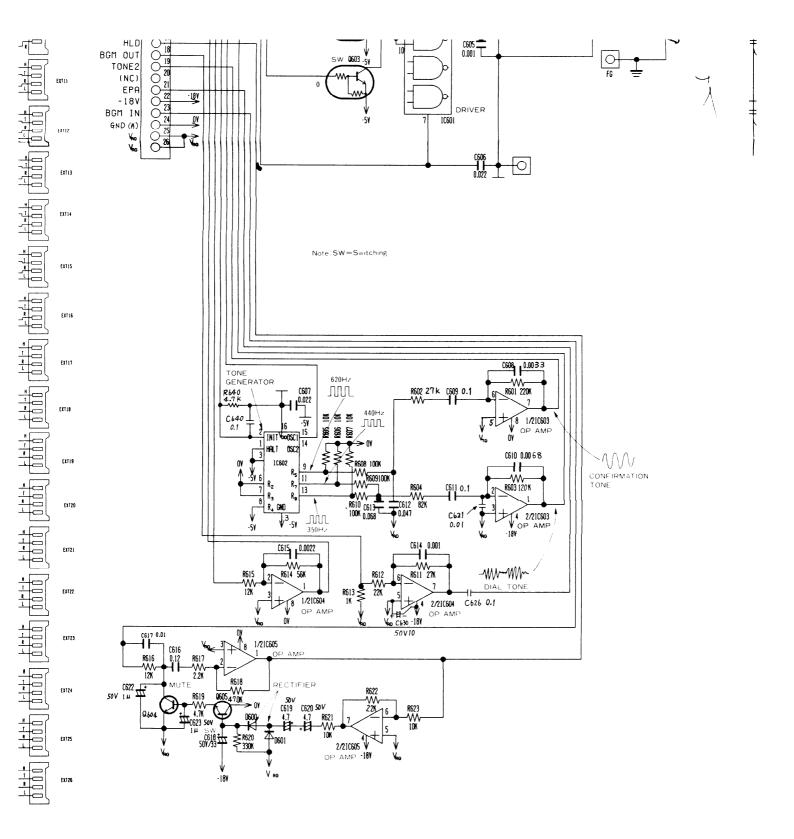


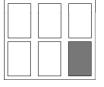


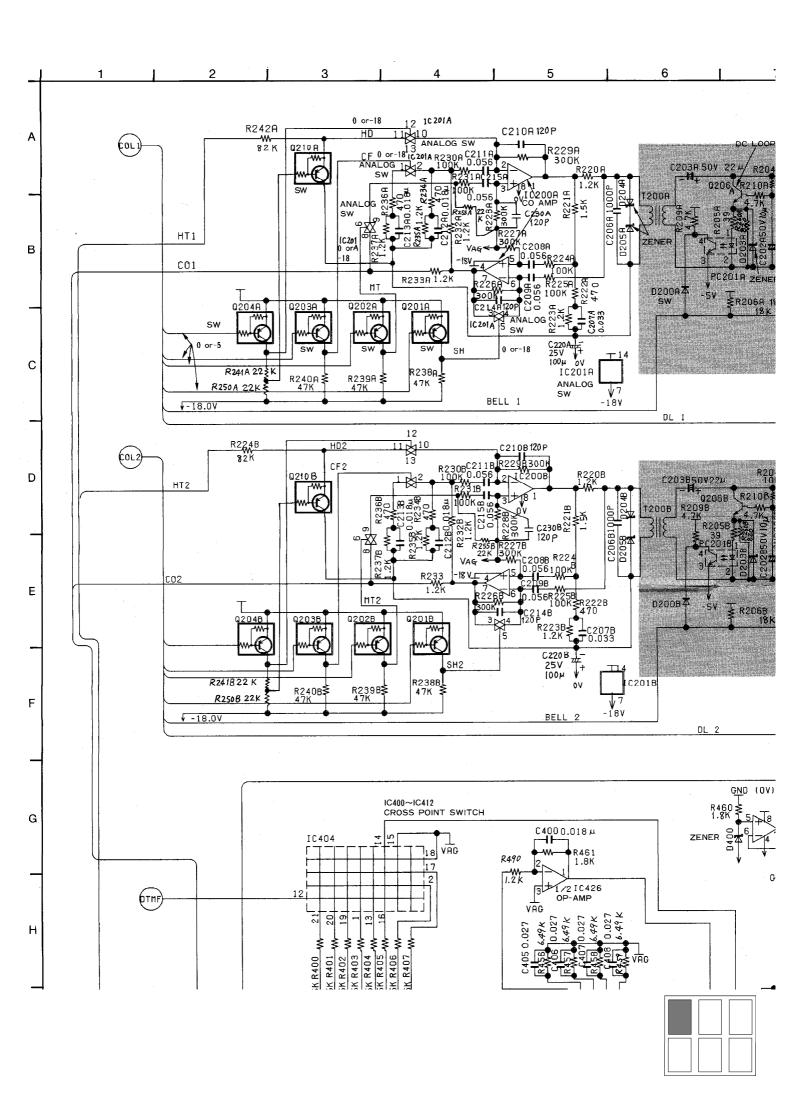






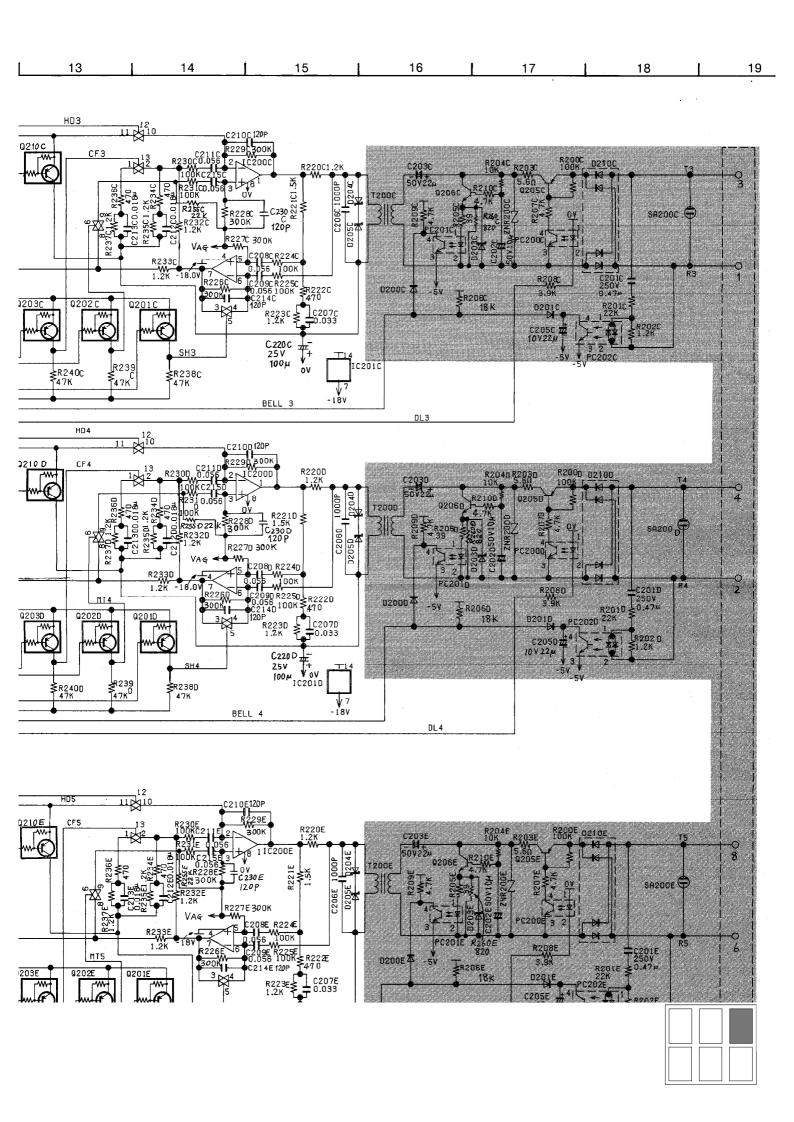


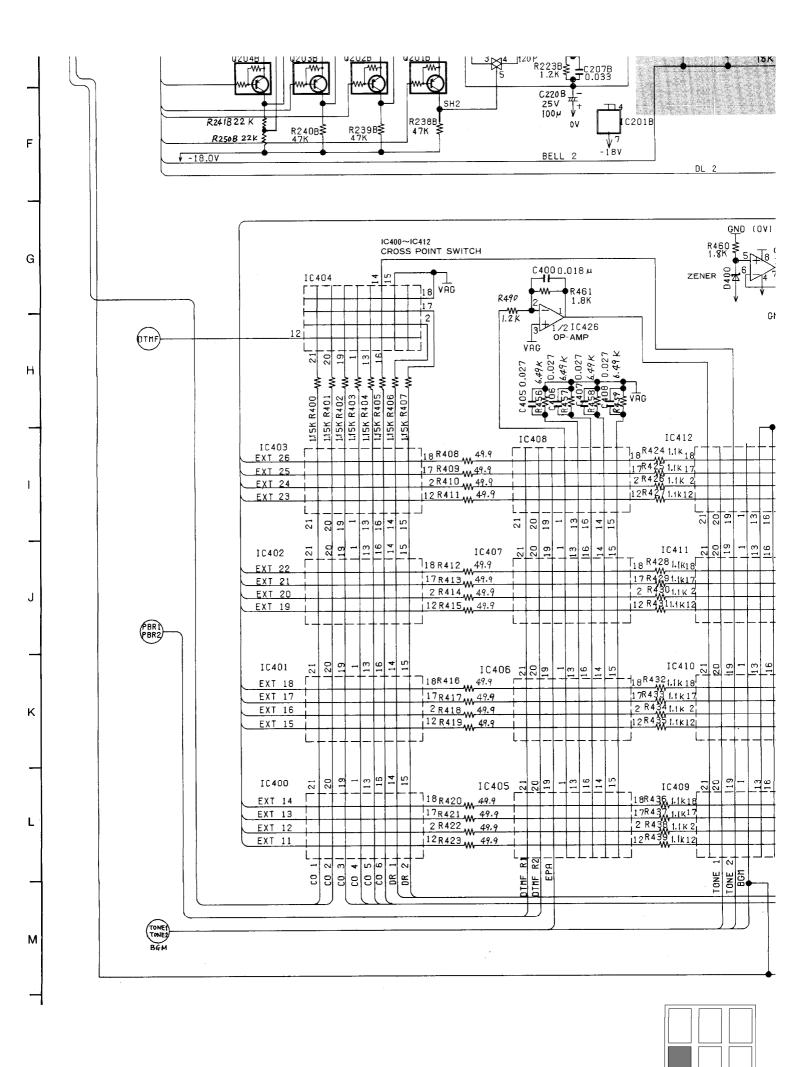


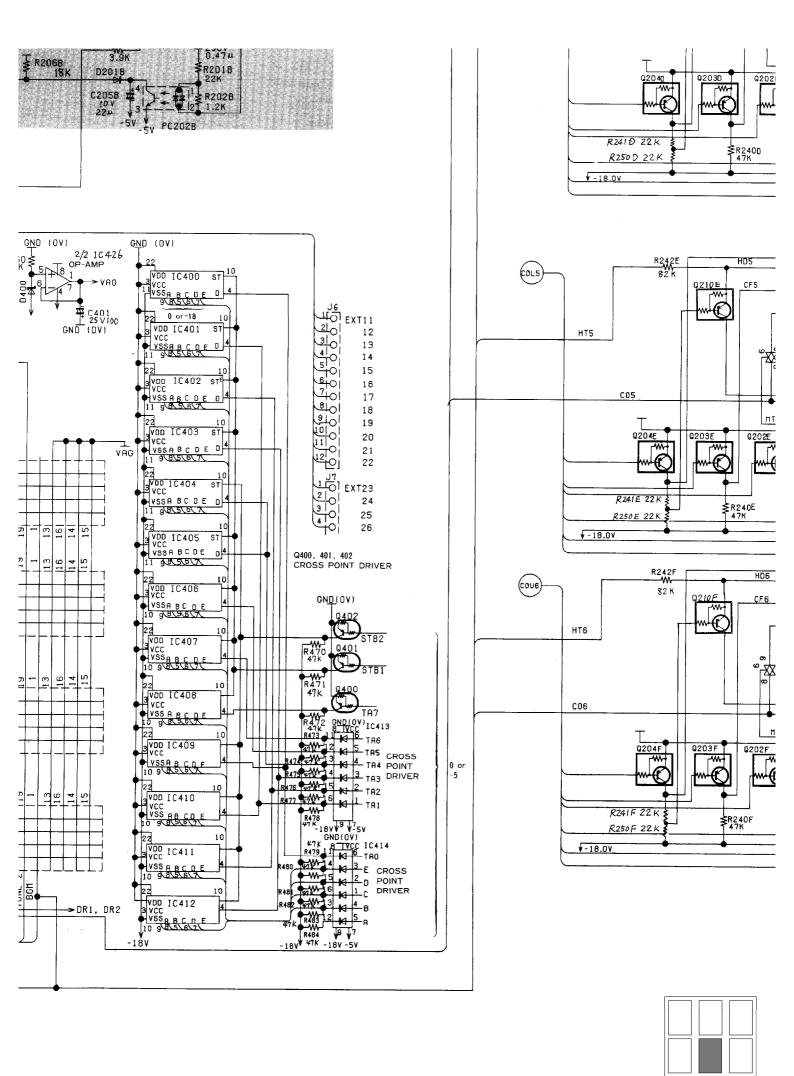


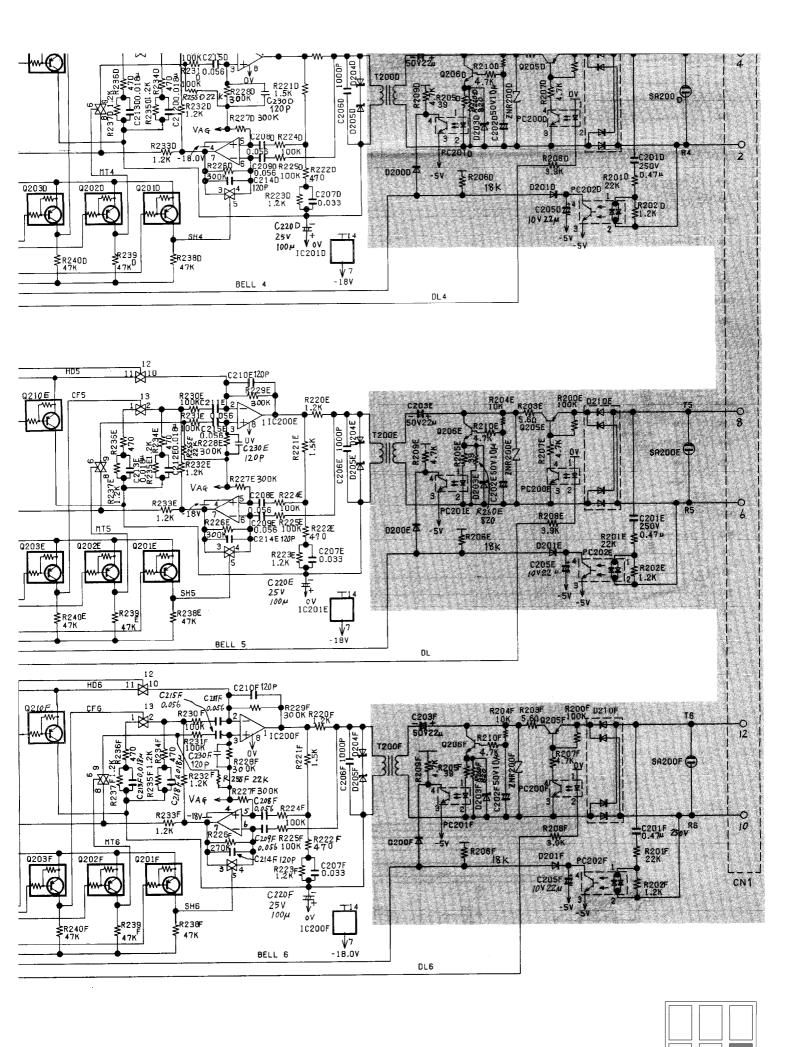
SCHEMATIC DIAGRAM

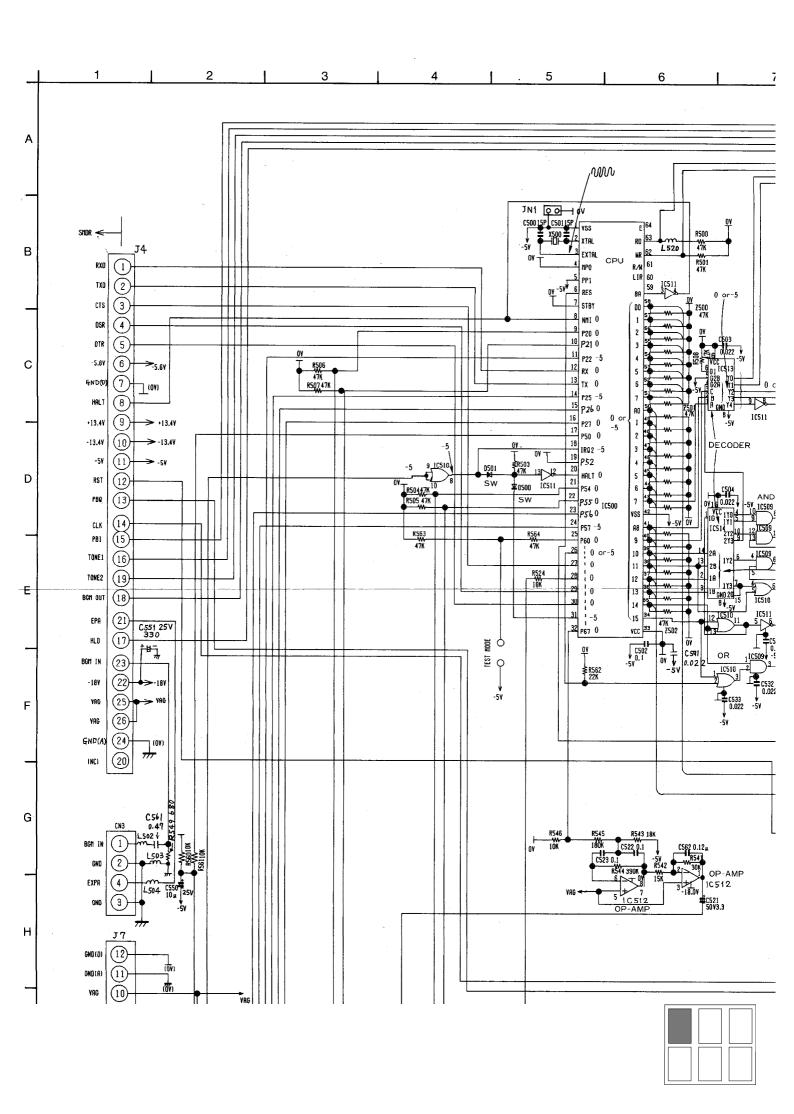
11 12 MAIN-B BOAD R242C 82 K (согэ RECTIFIER нтз SA200A C03 PC201A ZÉNER R1 | 9 R208A Э.9К 5V ₹ ₹R206A 18K Q204C PC202A R241C 22K R250C 22K **▼**-18V Note:SW=Switching (COL 4 D210B 1B50V22µ 0206B HT4)SA200B C04 ₹ R2068 18K R201B R241D 22K R250D 22K √-18.0V DL 2 GND (OV) 2/2 IC426 OP-AMP R242E 82 K COL5 VDD IC400 ST ZENER 0 C401 25 V 100 GND (OV) EXT11 VDD IC401 HT5 13 14 15 VDD IC402 ST C05 17 18 19 0203E 0204E 20



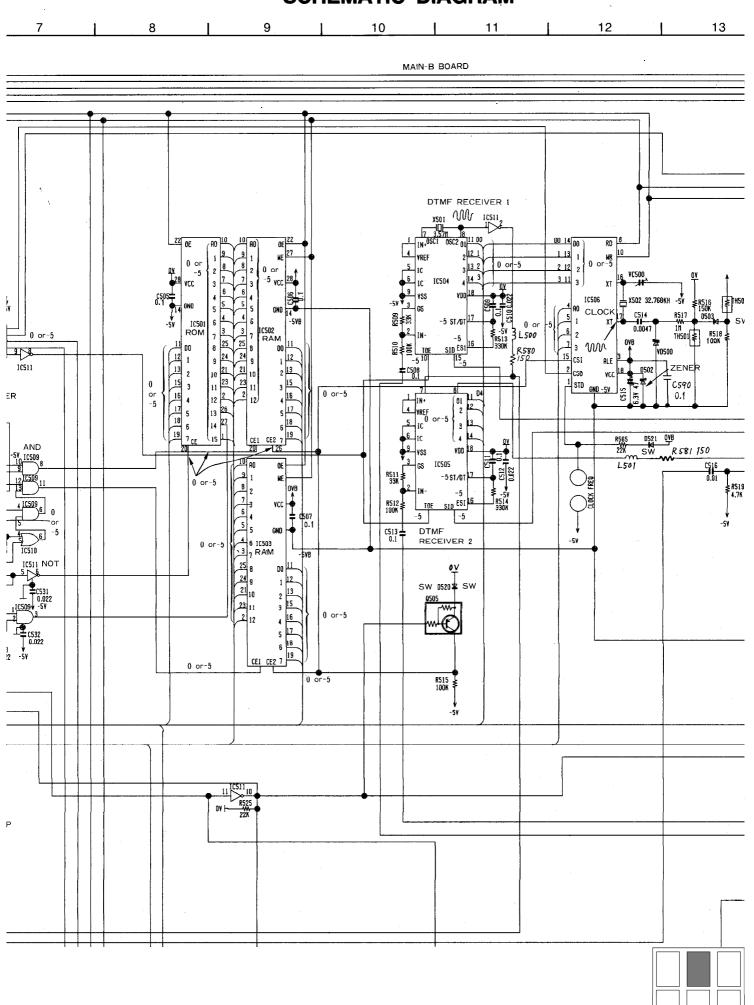


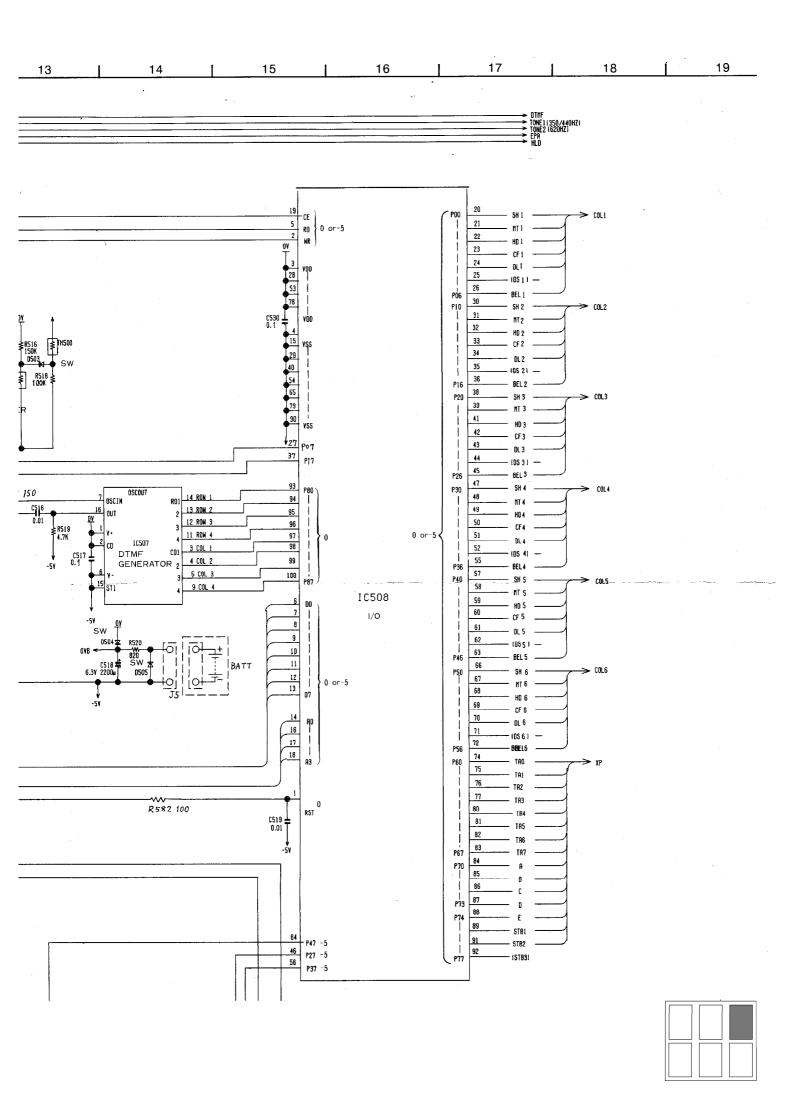


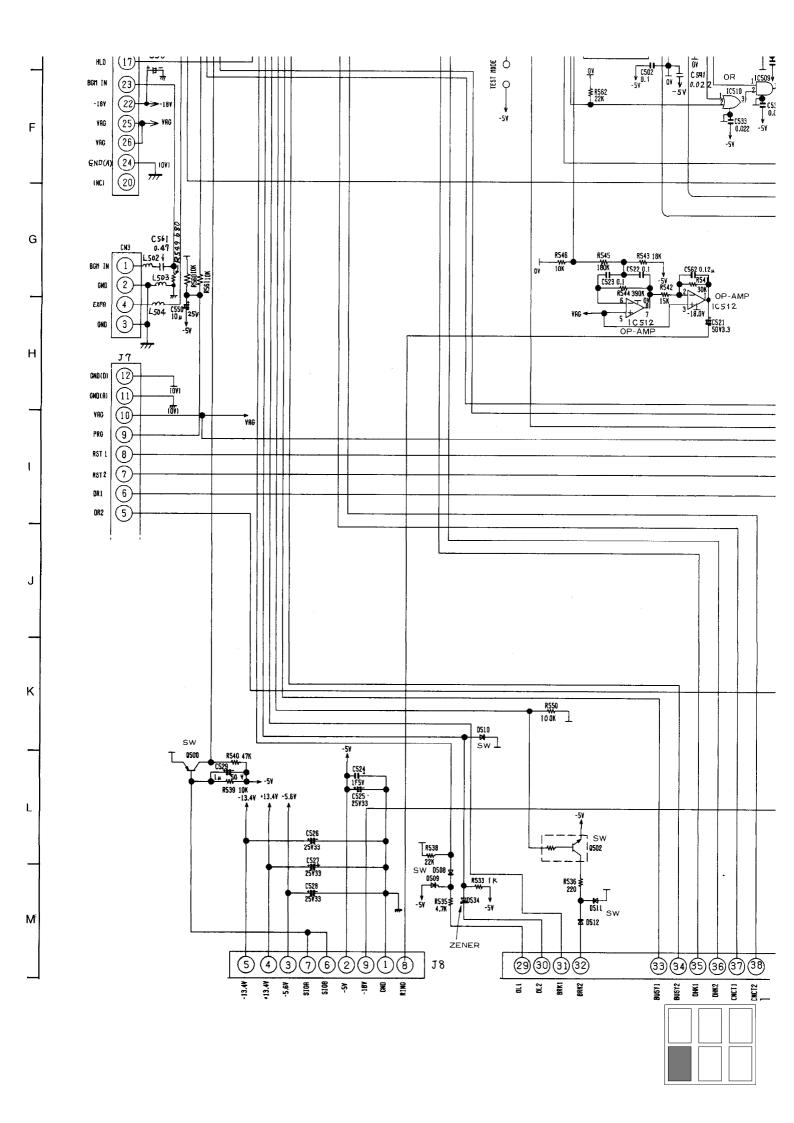


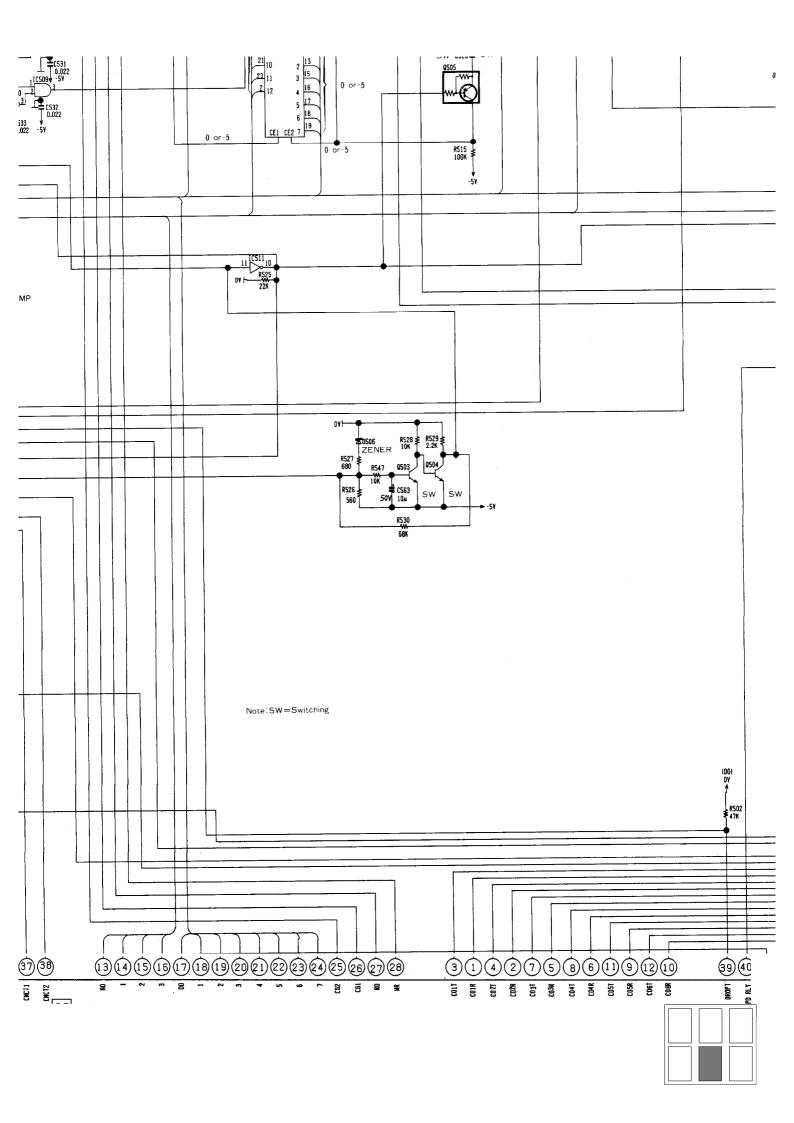


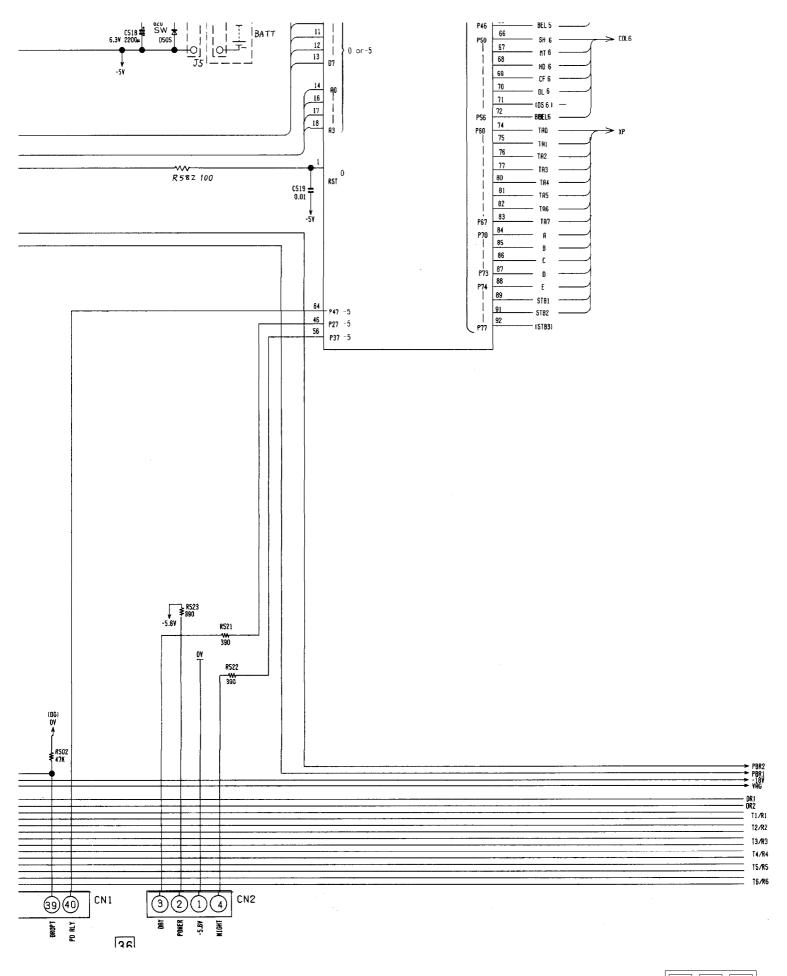
SCHEMATIC DIAGRAM





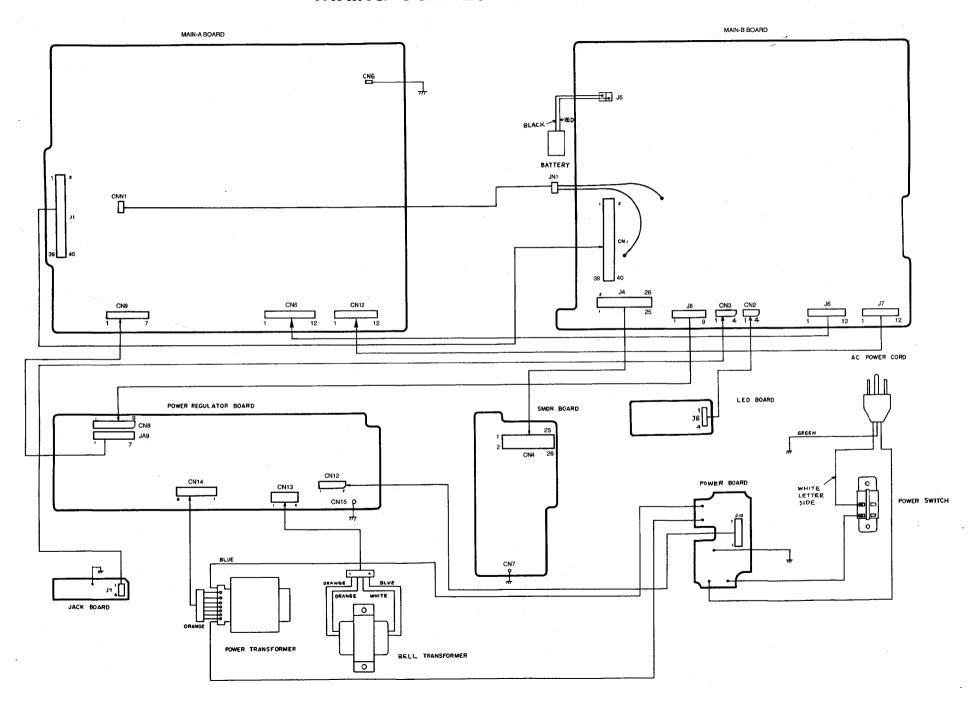






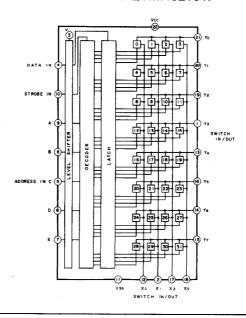


WIRING CONNECTION DIAGRAM

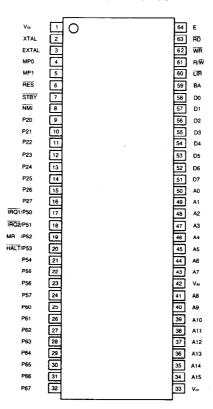


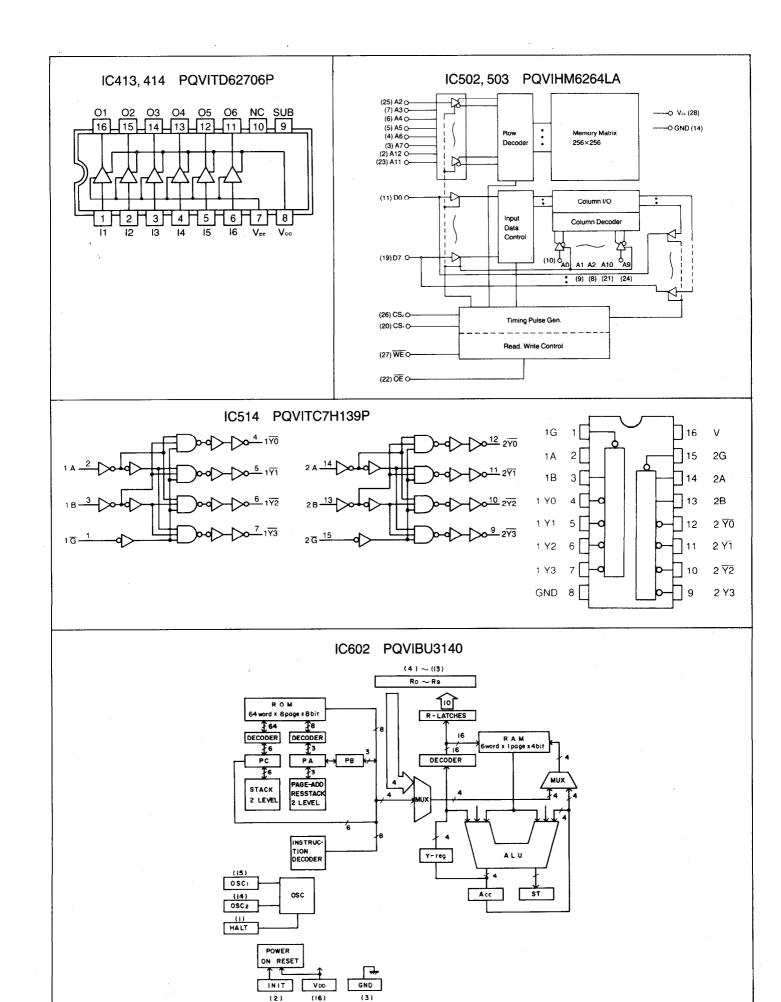
IC BLOCK DIAGRAM

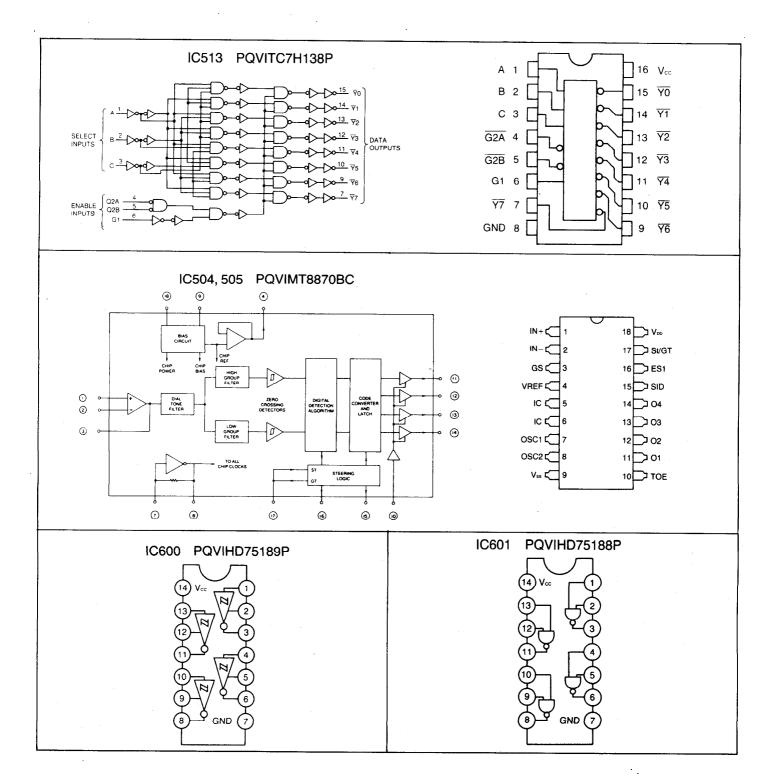
IC400~412 PQVIM402101P

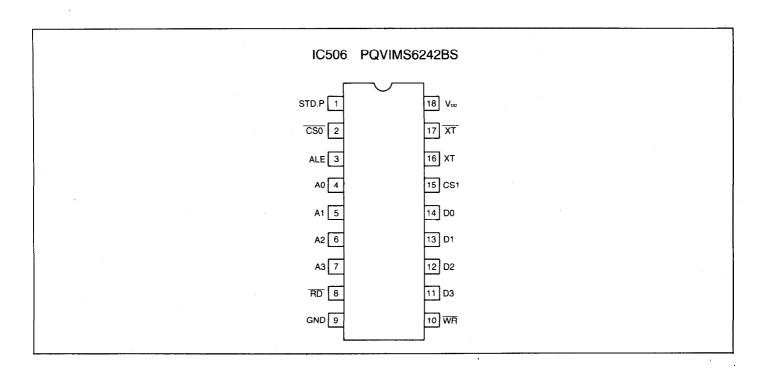


IC500 PQVIH63B03XP

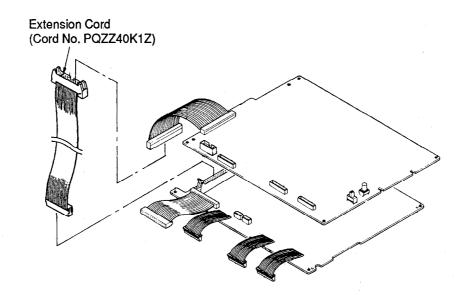








EXTENSION CORD CONNECTING METHOD



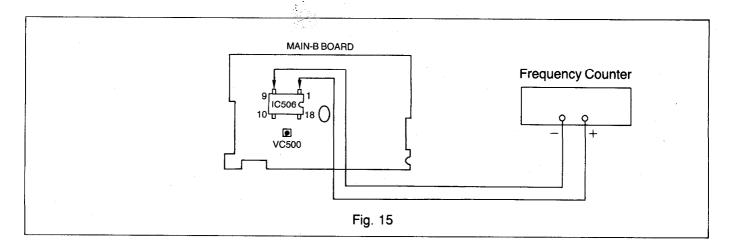
ADJUSTMENTS

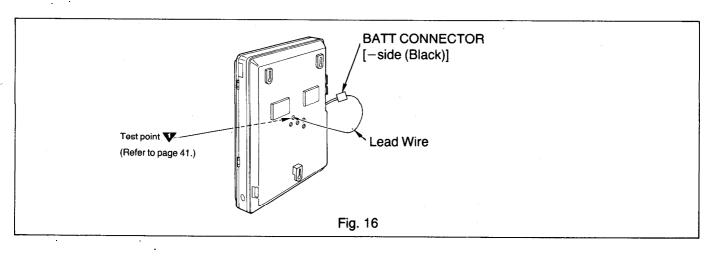
■ OSCILLATION PERIOD ADJUSTMENT

Perform the following adjustment after replacing IC506 and VC500.

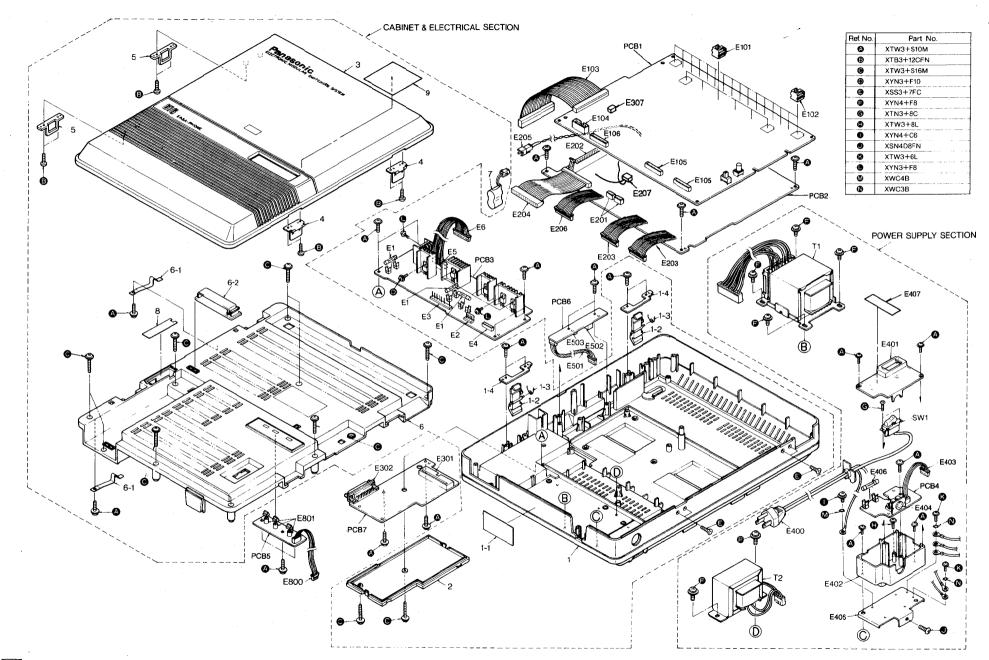
- 1. Connect the AC cord to the AC power source.
- 2. Set the power switch to ON.
- 3. Connect the lead wire. (See Fig. 16) (After adjustment, remove the lead wire.)
- 4. Push the reset switch.
- 5. Connect the frequency counter. (See Fig. 15)
- 6. Set the frequency counter to PERIOD.
- 7. Adjust VC500 for a reading of () msec on the frequency counter.

Room temperature for adjusting (°C)	Period value (msec)	Room temperature for adjusting (°C)	Period value (msec)
14~14.9	15.624943 (±0.00001)	20~20.9	15.624880 (±0.00001)
15~15.9	15.624933 (±0.00001)	21~21.9	15.624876 (±0.00001)
16~16.9	15.624922 (±0.00001)	22~27.9	15.624870 (±0.00001)
17~17.9	15.624910 (±0.00001)	28~28.9	15.624876 (±0.00001)
18~18.9	15.624899 (±0.00001)	29~29.9	15.624880 (±0.00001)
19~19.9	15.624888 (±0.00001)		
<u></u>			



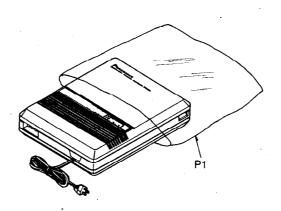


EXPLODED VIEW



51

ACCESSORIES & PACKING MATERIALS



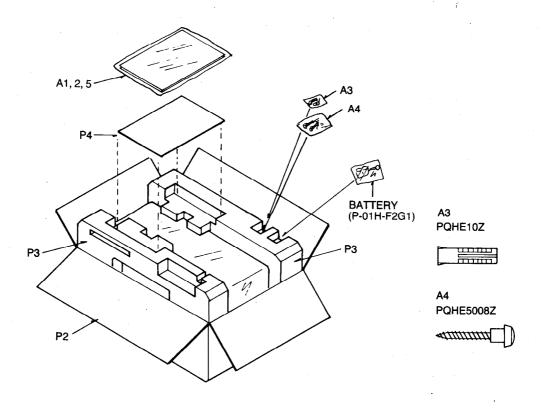


Fig. 18

	DED	LACEM	FNT	DAD	TSTI	ST.			
Notes:		LAULIN			10 1		el KX-T6	1610-1	
Printed circuit boa	rd assembly	with mar	k (NI	Δ) is	na lor		0110110		
available after pro	•		•	,		•			
2. Important safety r		, in ideal			Jp.0				
	Components identified by the A mark special characteristics important								
for safety.	—								
•	nv of these o	ompone	nts. i	ise oi	nlv ma	nufac	turer's sc	ecified	
parts.	When replacing any of these components, use only manufacturer's specified								
3. The S mark indica	ates service s	tandard	parts	and i	mav d	iffer fro	om produ	ıction	
parts.			Jan 041 10		,		э р. о ш		
4. RESISTORS & CAPACITORS									
Unless otherwise									
All resistors are in		=l000Ω.N	/⊫ l00	OkΩ					
All capacitors are i	, ,				01uF				
*Type &Wattage o			,		•				
Type									
	ERX:Metal Fil	m	PQF	D:Ca	arbon				
ERD:Carbon I	ERG:Metal O	xide	PQF	RQ:Fi	ıse				
PQ4R:Chip	ERO:Metal Fi	ilm ERF:Wire Wound							
Wattage	*···			-					
10,16,18:1/8W	14,25,\$2:1/4	W 12	, 5 0,S	1:1/2	W 1:	1W	2:2W	5:5W	
*Type & Voltage of	f Capacitor						· · · · · · · · · · · · · · · · · · ·	<u> </u>	
Туре									
ECFD:Semi-Cond	uctor	ECCD,	CKI),PQC	CBC,P	QVP:	Ceramic		
ECQS:Styrol		ECQM,	ECQ	V,EC	QE,E	CQU,E	CQB : F	olyester	
PQCBX,ECUV:Ch	nip	ECEA,	ECSZ	,ECC	S:E	lectrol	ytic		
ECMS:Mica		ECQP :	Poly	propl	ylene				
Voltage									
ECQ Type EC	QG	ECSZ 1	уре			Ot	hers		
EC	QV Type								
1H: 50V 05:	: 50V	OF:3.1	5V	Ø	:6.3V		1V :3	5V	
2A:100V 1:	100V	1A:10V	/	1A	:10V		50,1H:	50V	
	200V	1V:35V	/	1C	:16V		1J :6	3V	
2H:500V		OJ:6.3	V	1E,2	5:25	/	2A :1	00V	

Ref. No.	Part No.	Part Name & Description	Pcs
	CABIN	IET & ELECTRICAL PARTS	<u> </u>
1	PQYMT61610M1	Rear Cabinet Assembly	1
1-1	PQGT384Z	Name Plate	1
1-2	PQHR9120Z8	Hook	2
1-3	PQUS91Z	Spring, Hook	2
1-4	PQUL51Z	Bracket, Hook	2
2	PQKE31Z8	Cabinet Door	1
3	PQYF1T61610M	Front Cabinet Assembly	1
4	PQBH2Z	Hinge	2
5	PQHR9121Z8	Hinge	2
6	PQYF2T61610M	Inside Cover Assembly	1
6-1	PQUS102Z	Leaf Spring	2
6-2	PQHR5044Z	Cord Holder	1
7	P-01H-F2G1	Battery	1
8	PQUV50Z	Battery Cover	1
9	PQQT4134Z	Label, Front Cabinet	1
• • • • • • • • • • • • • • • • • • • •	ACCESSORIE	S AND PACKING MATERIALS	1
A 1	PQQX5341Z	Installation Manual	1
A2	PQQX5367Z	User Guide	1
A3	PQHE10Z	Mounting Bracket (Curl Plug)	3
A4	PQHE5008Z	Mounting Bracket (Screw)	3
A5	PQQX5402Z	User Guide (for KX-T30830/30820)	1
P1	XZB45X06A05	Protection Cover	1
P2	PQPK431Y	Packing Case	1
P3	PQPN9036Z	Pad Complete (L,R Side)	1
P4	PQPN668Z	Pad	1

]	Ref. No.	Part No.	Part Name & Description	Pcs
l		MAIN	A BOARD PARTS	
	PCB1	PQWP161610M1	Main-A P.C. Board Assy (NLA)	1
	IC300,301	PQVi671152F	(ICs)	2
	Q300A-300P	2SB644	(TRANSISTORS) Transistor (Si)	16
		PQVTDTC114Y	Transistor (Si) Transistor (Si) Transistor (Si) S	16
	Q303A-303P Q304A-304P ,305I-305P		Transistor (Si) S Transistor (Si)	16 24
	Q305A-305H ,307	2SA937	Transistor (Si)	9
	Q306	2SB1015	Transistor (Si)	1
I	Q308 Q309	2SD1406 DTC124XA	Transistor (Si) Transistor (Si)	1
	Q310,311, ,312	DTA124EA	Transistor (Si)	3
	D300I-300P ,301A-301P	1SS131 1SS131	(DIODES) Diode (Si) Diode (Si)	162
	,302A-302P ,303A-303P ,304A-304P ,305A-305P ,309A-309P ,310A-310P ,311A-311P ,312A-312P ,313-322	133131	Diode (3)	
$\frac{1}{2}$	D306A-306P ,307A-307P	MA4047	Diode (Si)	16
$\frac{1}{2}$	D308A-308P	MA4030	Diode (Si)	16
	SA30A-30F ,31A-31F	PQVDSAE310F1	(VARISTORS) Varistor (Surge Absorber) S	12
	ZNR30A-30P ,31A-31P	ERZC03DK241	Varistor	32 1
	PC300A- PC300P	PQVITLP521	(PHOTO ELECTRIC TRANSDUCE Photo Coupler	16
	Z300,301	EXBP88222K	(COMPONENTS COMBINATIONS Resistor Array S	3
1	,303 Z302 Z304,305	PQRS8B8102J EXBP88473K	Resistor Array S	1 2
1		·		
	L30A-30F, ,31A-31F	PQLQZK101K	(COILS) Choke Coil	12
	L32A-32F, ,33A-33F	PQLQZM100K	Choke Coil	12
		PQLQZM2R2M	Choke Coil	64
1	1			l

Ref. No.	Part No.	Part Name & Description	Pcs	Ref. No.	Part No.	Part Name & Description		Pcs
		(TRANSFORMERS)	 			(OTHERS)		
T300A-300P	ETA14Y85AY	Interface Transformer	16	E301	PQJJ1TA3Y	Jack, CO (MJ1A-MJ1F)		6
T301A-301P	ETE13K38AY	Pulse Transformer	16	E302	PQJJ1TB16Z	Jack, EXT (MJ2A-MJ2P)		16
			'	E303			1	10
1					PQJS40R30Z	Connector Socket, 40P (J1)	į	1
İ		(OD)(OTAL OCCULATOR)		E304	PQJP14D49Z	Connector Plug, 14P (CN10)	i	1
		(CRYSTAL OSCILLATOR)		E305	PQJP12D68Z	Connector Plug, 12P (CN6,7)		2
X300	PQVCX4000N8Z	Crystal Oscillator	1	E306	PQJP7D68Z	Connector Plug, 7P (CN9)		1
				E307	PQJP2D72Z	Connector Plug, 2P (CNN1)		1
		(SWITCHES)						
SW2	PQSH1A12Z	Switch, Reset	1		MAIN-B BOAT	RD PARTS		
SW3	PQSS2A20Z	Switch, System Program	1 1	PCB2	PQWP261610M1	Main-B P.C.Board Ass'y (NLA)		
,	1			1 002	T GWT 201010IWT	IVIAITED F.O.BOARD ASS y (IVLA)		
RLY10A-10F	POSI 497	(RELAYS) Relay	6			100		
RLY30A-30P		Relay				(ICs)	-	
THE TOOK-SO!	1 000412	nelay	16	IC200A-	PQVINJM4558M	IC		6
		*		IC200F		1		
		İ		IC201A-	PQVITC4066BF	IC		6
1 .		(CAPACITORS)	1 1	IC201F	+			
C300A-300P	ECEA1HU3R3	3.3 S	32	IC400-412	PQVIM402101P	lic .	l	13
,301A-301P			1 1	IC413,414	PQVITD62706P	IC		2
C302A-302P	ECEA1HU2R2	2.2	16	IC426.512	PQVINJM4558D	ic		2
C303A-303P	ECKD1H472MD	0.0047	32	IC500	PQVIH63B03XP	lic		4
,304A-304P		3.0017	"		I		1	1
1 '	ECEA1HUR47	0.47	1 1	IC501	PQWIT61610M2	ic	1	1
			16	IC502,503	PQVIHM6264LA	IC		2
	ECEA1HU010	1	32	IC504,505	PQVIMT8870BC	IC	S	2
,307A-307P			1 1	IC506	PQVIMS6242BS	IC		1
C309, 313	ECCD1H221J	220P	2	IC507	PQVILR4089	IC	1	1
C310,311	ECCD1H470KC	47P	2	IC508	PQVI63HB110	lic	- 1	1
C314,315	ECEA1EU101	100	2	IC509	PQVITC7H08P	ic	- 1	
C317,322	ECEA1VU101	100	2	IC510	PQVITC7H32P	ic	- 1	
C318-321	ECEA1VU330	33 S	4	IC510			اء	1
1	ECKDKC222KB	0.0022	1 1	4	PQVITC7H04P	IC	S	1
			6	IC513	PQVITC7H138P	IC	s	1
C340,341	ECEA1VSS222	2200	2	IC514	PQVITC7H139P	IC	ı	1
C360,363	ECQV1H104JZ	0.1	2	į			ı	
C361,362	ECKD1H223MD	0.022	2					
C365A-365P	ECUV1H224ZF	0.22	16			(TRANSISTORS)		
C370	ECEA1CU102	1000	1 1	Q201A-201F	DTA124XA	Transistor (Si)		27
		. ,		,202A-202F	1	Transition (Oi)		۲,
		Ì	1 1	,203A-203F	1	į	- 1	
		(RESISTORS)	1	1 · ·]		
Danna anno	PQ4R10XJ220	(NESISTONS)	1	,204A-204F	1	İ		
	FQ4H 10XJ220	22	32	,400,401,40			ا ۵	
,301A-301P			1	Q205A-205F		Transistor (Si)	$\stackrel{\triangle}{\mathbb{A}}$	6
	PQ4R10XJ682	6.8k	32	Q206A-206F	2SC2590	Transistor (Si)	Z <u>Y</u>	6
,303A-303P			1 1	Q210A-210F	DTA144A	Transistor (Si)	s	7
	PQRD2TJ102	1k S	16	,505		, ,		
R305A-305P	PQ4R10XJ470	47	16	Q500	2SA937	Transistor (Si)		1
	PQ4R10XJ154	150k	16	Q502	PQVTDTC114Y	Transistor (Si)	اء	1
	PQ4R10XJ103	10k	16	Q503,504	2SC2021	Transistor (Si)	٦	2
	PQ4R10XJ561	560	16	200,004	-502021	Transistor (SI)	I	ا ۲
	ERD16TJ154	150k	1 1	1		1		
			4			· · · · · · · · · · · · · · · · · · ·		
the second secon	ERD16TJ105	1M	1	1_	Ì	(DIODES)	. 1	
	ERD16TJ103	10k	2	D200A-200F	1SS131	Diode (Si)	\triangle	24
	ERD16TJ104	100k	1	,201A-201F		į	- 1	
R317	ERD16TJ393	39k	1	,500,501			- 1	
R318	ERD16TJ821	820	1 1	,503,504				
R319	ERD16TJ181	180		,505,508-		1	- 1	
	ERD16TJ101	100	18					
,321A-321P		l ·	'"	,512,520			1	1
	PQ4R10XJ3R3	. .	1	,521	DOUBLIZOSE:	5	, J	_
		3.3	16		PQVDHZS2B1		Δ	6
	PQ4R10XJ472	4.7k	16	D204A-204F	MA4047	Diode (Si)	ł	12
	PQ4R10XJ121	120	32	,205A-205F				j
,325A-325P]	D210A-210F	PQVDS1YB40F1	Diode (Si)	Δ	6
R326A-326P	PQ4R10XJ222	2.2k	16	D400	MA4091	Diode (Si)	_	1 I
	PQ4R10XJ820	82	16	D502	MA4062	Diode (Si)	- 1	- i I
	ERD16TJ220	22	1	D502		1		; I
			'		MA4036	Diode (Si)	1	_
				D534	PQVDMTZ15A	Diode (Si)	-	1 1
				VD500	PQVD1SV124	Diode (Si)		1
		e 1						<u>.</u>

Ref. No.	Part No.	Part Name & Description		Pcs	Ref. No.	Part No.	Value		Pcs
ZNIDOOOA	ED7007DK000	(VARISTORS)	Æ		C502,505-	ECQV1H104JZ	0.1		13
ZNR200A- ZNR200F	ERZC07DK820	Varistor	٠	6	,509,511 ,513,517				
					,522,523				
T2004-200E	ETA14Y85AY	(TRANSFORMERS) Interface Transformer	A	6	,530,590 C503,504	ECKD1H223MD	0.022		8
1 200A-2001	L1A14103A1	Interface Transformer	413	ů	,510,512	ECND II IZZSIVID	0.022		0
					,531,532				
Z500,501	EXBP88473K	(COMPONENT COMBINATION Resistor Array	NS) S	3	,533,591 C514	ECQM1H472JV	0.0047		1
,502	EXB1 0047010	The sister Array	١	١	C515	ECEA1AU470	47	s	1
,		 	ı	1	C516,519	ECKD1H103MD	0.01	·	2
TH500	PQRRTS203U	(THERMISTORS) Thermistor		, l	C518 C521	ECEA0JSS222 ECEA1HU3R3	2200 3.3		1
TH501	PQRRTS104U	Thermistor		1	C524	EECW0HS105Z	1		1
		,			C525-528	ECEA1VU330	33	s	5
		(CRYSTAL OSCILLATORS)		,	,551 C529	ECEA1HU010	1	ļ	1
X500	PQVCX7600N5Z	Crystal Oscillator		1	C550	ECEA1EU100	10		1
X501	PQVCX3579H5R	Crystal Oscillator		1	C561	ECQV1H474JZ	0.47		1
X502	PQVCL3276N4Z	Crystal Oscillator		1	C562	ECQV1H124JZ	0.12	-	1
		444 Buomo = -							
SA200A-	PQVDSAE310F1	(VARISTORS) Varistor (Surage Absorber)	<u>ƙ</u> s∣	6	B200A-200F	ERD16TJ104	(RESISTORS)	Δ	11
SA200F	T GT B B A L B T B T	t datable (editage Absoluter)		ĭ	,510,512	21101010104	look	4	• • •
		}	J		,515,518]	
		(VARIABLE CAPACITOR)			,550 R201A-201F	PQRD12VJ223	22k	Δ	6
VC500	PQCVTZB30B	Trimmer		1		ERD16TJ122	1.2k		43
		<u>.</u>			,220A-220F				
		(COILS)		1	,223A-223F ,232A-232F	1	*		
L500-504	PQLQZM1R5M	Choke Coil		5	,233A-233F				
L520	PQLQZM2R2M	Choke Coil		1	,235A-235F	3			
					,237A-237F	,490 ERD16TJ5R6	5.6	· 🛕	6
	£.	(PHOTO ELECTRIC TRANSDI	UCER	S)		ERD16TJ103	10k	<u> </u>	13
PC200A-	PQVIPC851K	Photo Coupler	Δs	6	,524,528				
PC200F PC201A-	PQVITLP521	Photo Coupler	ı́ s	6	,539,546 ,547,560	ļ			
PC201F			-		,561			^	
PC202A- PC202F	PQVIPC814K	Photo Coupler	ı⁄t s	6	i	ERD25TJ390	39	<u> </u>	6
PCZUZF						ERD10TLJ183 ERD16TJ472	18k 4.7k	<u> </u>	6 20
			į		,209A-209F				-
C201A 201E	ECQE2E474MZ	(CAPACITORS) 0.47	Δ		,210A-210F				
1	ECEA1HU100	10	$\overline{\Lambda}$	6 7	,519,535 R208A-208F	ERD16TJ392	3.9k	Æ	6
,563					R221A-221F	ERD16TJ152	1.5k		6
	ECEA1HU220 ECEA1AU220	22 22	$\hat{\Lambda}$	6		ERD16TJ471	470		18
	ECKD1H102KB	1000P	213	6	,234A-234F ,236A-236F	i .			
l .	ECQV1H333JZ	0.033		6	R224A-224F	ER016CKF1003	100k		24
C208A-208F ,209A-209F	ECQV1H563JZ	0.056		24	,225A-225F ,230A-230F	1			
,209A-209F		ĺ			,231A-231F	l .			
,215A-215F	4]	R226A-226F	ER016CKF3003	300k		24
C210A-210F ,214A-214F	ECCD1H121KC	120P		12	,227A-227F				
1 1	ECQM1H183JZ	0.018		13	,228A-228F ,229A-229F				
,213A-213F		,			R238A-238F	ERD16TJ473	47k		45
,400 C220A-220E	ECEA1EU101	100		6 7	,239A-239F				
,401	ECEA1EU101	100	l	_ ′	,240A-240F ,470-484				
C230A-230F	ECUV1H121JC	120P		6	,500-508			l	
	ECQV1H273JZ	0.027	l	4	,540,563			İ	
C500,501	ECCD1H150JC	15P		2	,564	:			

Ref. No.	Part No.	Part Name & Description		Pcs	Ref. No.	Part No.	Part Name & Description	Pcs
R241A-241F		22k		22	D15-18	1SS131	Diode (Si)	11
,250A-250F	1				,23-29		l	
,255A-255F				i	D19	MA1056	Diode (Si)	1
,525,538		1			D20	PQVDEK03	Diode (Si)	1
,562,565				i I	Í			}
R242A-242F	ERD16TJ823	82k		6				
R260A-260F	PQ4R18XJ821	820	Δ	6			(COMPONENT COMBINATION)	ļ
R400-407	ER016CKF1151	1.15k		8	CA1	PQXF6WB07	Capacitor Array	1 1
R408-423	ER016CKF49R9	49.9		16				
R424-439	ER016CKF1101	1.1k		16				l
R456-459	ER016CKF6491	6.49k		4			(CAPACITORS)	
R460,461	ERD16TJ182	1.8k		2	C1	ECET50S103SW	10000	1
R509,511	ERD16TJ333	33k		2	C2	ECET35S472SW	4700	1
R513,514	ERD16TJ334	330k		2	C3	ECEA1EU331	330	1
R516	ERD16TJ154	150k						1
R517		l .		1 1	C4,6	ECET35S682SW	6800	2
	ERD16TJ105	1M		1 1	C5,7	ECEA1EU331	330	2
R520	ERD16TJ821	820		1	C8	ECET35S222SW	2200	1
R521,522	ERD16TJ391	390		3	C9	ECEA1AU221	220	1
,523					C10	ECKD1H103MD	0.01	1
R526	ERD16TJ561	560		1	C11	ECEA1AHA101	100	1
R527,549	ERD16TJ681	680		2	C12	ECKD1H102KB	0.001	1
R529	ERD16TJ222	2.2k		1	C13	ECEA1HU2R2	2.2	1
R530	ERD16TJ683	68k		1	15.5	1		Ι ΄
R533	ERD16TJ102	1k			1			l
R536	ERD16TJ102	220		1		1	(DESIGNADO)	I
R541				1	1		(RESISTORS)	1
	ER016CKF3002	30k	l	1	R12	ERD16TJ682	6.8k	1
R542	ERD16TJ153	15k		1	R13	ERD16TJ331	330	1
R543	ERD16TJ183	18k		1	R14	ERDS1TJ101	100	1
R544	ERD16TJ394	390k		1	R15,16	ERD16TJ823	82k	2
R545	ERD16TJ184	180k		1	R17,18	ERD16TJ103	10k	- 2
R580,581	ERD16TJ151	150		2	R19,20	ERDS1TJ151	150	2
R582	ERD16TJ101	100		1	R21,22	PQRD1VJ1R0	1	2
		1.55		'	R23,24	ERDS1TJ181	180	2
			1		- I	1	it '	
		LOTUEDO:			R30	ERD25TJ153	15k	1
		(OTHERS)			1	1		1
E201	PQJP4D14Z	Connector Plug, 4P (CN2,3)		2			(OTHERS)	
E202	PQJP40D53Z	Connector Plug, 40P (CN1)	Δ	1	E1	XBA1C20NU100	Fuse (F1-F3)	3
E203	PQJS12L31Z	Connector Socket, 12P (J6,7)		2	E2	PQJP4D16Z	Connector Plug, 4P (CN13)	1
E204	PQJS26R30Z	Connector Socket, 26P (J4)		1	E3	PQJP7D19Z	Connector Plug, 7P (CN14)	1 1
E205	PQJS2L26Y	Connector Socket, 2P (J5)		1	E4	PQJP7G3Z	Connector Plug, 7P (CN12)	1
E206	PQJS9L31Z	Connector Socket, 9P (J8)		1 1	E5	PQJP9D68Z	Connector Plug, 9P (CN8)	1
E207	PQJS2L55Z	Connector Socket, 2P (JN1)		1 1	E6	POJS7L33Z	Connector Socket, 7P (JA9)	li
				'		1 003/2002	Connector Socket, 7F (0A9)	'
	POWER REGU	ATOR BOARD PARTS				POWER	SUPPLY PARTS	
PCB3	PQWP361610M1	Power P.C.Board Ass'y (NLA)		1	PCB4	PQWP461610M1	Power P.C.Board Ass'y (NLA)	1
		L.,			1		(with/C401-404,ZNR401, L401,	l
		(ICs)				1	E403, E404, E406)	
IC1	PQVITA7924	IC		1	1		1	1
IC2	PQVIPC79M18F	IC .		1	Ī		(CAPACITORS)	1
IC3	PQVITA7812AP	IC	s	1	C401,404	ECQU1A473MH	0.047	2
IC4	AN7912T	IC .	S	1	C402,403	ECKDKC222KB	0.0022	2
			J	'	0402,403	ECNDNOZZZNB	0.0022	
		(TRANSISTORS)					(VADISTOD)	
Q2	2SA937	1,	Į		7117.404	ED70440V:5:::	(VARISTOR)	
	1	Transistor (Si)		1	ZNR401	ERZC14DK431U	Varistor 🛕	1
Q3	2SB834	Transistor (Si)		1		,		Į.
Q4	2SC2673	Transistor (Si)		1			1	1
	2SA881	Transistor (Si)		1	1	1	(COIL)	I
Q5	10004045	Transistor (Si)	İ	1	L401	PQLE61	Coil A	1
Q6	2SB1015		- 1	1	1			
	2SD1406	Transistor (Si)	Į	' 1	j .	1	I .	
Q6	· ·	Transistor (Si)					(SWITCH)	
Q6	· ·				SW1	FST15704V	(SWITCH) Switch Power	1
Q6 Q7	2SD1406	(DIODES)			SW1	EST15704V	(SWITCH) Switch, Power	1
Q6 Q7 D1,3	2SD1406 PQVD2B4B41	(DIODES) Diode (Si)		2	SW1	EST15704V	1,	1
Q6 Q7 D1,3 D2	2SD1406 PQVD2B4B41 PQVD3B4B41	(DIODES) Diode (Si) Diode (Si)		2	SW1	EST15704V	Switch, Power &	1
D1,3 D2 D10,12,13	2SD1406 PQVD2B4B41	(DIODES) Diode (Si)		2		EST15704V	1,	1
Q6 Q7 D1,3 D2	2SD1406 PQVD2B4B41 PQVD3B4B41	(DIODES) Diode (Si) Diode (Si)		2	SW1	EST15704V PQLT5M9M1A	Switch, Power (TRANSFORMERS)	1
Q6 Q7 D1,3 D2 D10,12,13 ,21,22	2SD1406 PQVD2B4B41 PQVD3B4B41	(DIODES) Diode (Si) Diode (Si)		2			Switch, Power	

Ref. No.	Part No.	Part Name & Description	Pcs
		(OTHERS)	
E400	PQWAT616M	AC Power Cord Assembly	1 1
E401	PQUV36Y	Power Box Cover	
E402	PQUV37Y	Power Box	1
E403	PQJS7L6Z	1.] ; [
1	1		1. 1
E404	PQJP7C1Z	Connector Plug, 7P (BATT JACK)	
E405	PQMD4012Z	Bracket, Power Box	1
E406	XBA2F15NU2	Fuse (F400)	1
E407	PQQT4181Z	Label	1
<u></u>			
	LED BO	ARD PARTS	
PCB5 、	PQWP5T61610M	LED P.C.Board Ass'y (NLA)	1
1			
		(DIODES)	
D800	LN220RPH	LED	1 1
D801	LN420YPH	LED	1 1
D802	LN320GPH	LED	
5002	ENGEGGIA		'
, in the second		LOTUEDO:	
F000	DO 1041 007	(OTHERS)	
E800	PQJS4L32Z	Connector Socket, 4P (J6)	1
E801	PQHR402Z	Spacer, LED	3
		·	
	JAC	SBOARD PARTS	
PCB6	PQWP661610M1	Llook B.C. Boord Apply (All A)	
PCB6	POWP661610M1	Jack P.C.Board Ass'y (NLA)	1
		i ·	1
			l
		(COILS)	
L501,502	PQLQZY333J	Choke Coil	2
L503,505	PQLQZL2R2K	Choke Coil	2
L504	PQLQZL1R0K	Choke Coil	1
L304	I GEGZETHON	Choke Coll	'
		, i	
		(TRANSFORMERS)	i i
T501,502	PQLT2D6A	Transformer	l 1 l
	,		
		(OADAOITOD)	
0504	50504547040	(CAPACITOR)	
C501	ECFD1E473MD	0.047	1
		(OTHERS)	
E501	PQJS4L17Y	Connector Socket, 4P (J7)	- 1
E502	PQJJ1E1Y	Jack, Paging	1
E503	SJJK8	Jack, EXT. Music	l i l
L303	30010	Jack, EXT. WUSIC	'
	SMDR BOA	ARD PARTS	
PCB7	PQWP761610M1	SMDR P.C.Board Ass'y (NLA)	1
ļ.		(ICs)	
ICEOC	DOMINIO SELCON	1. ,	,
IC600	PQVIHD75189P	IC	1
			1 1
IC601	PQVIHD75188P	IC	'
IC601 IC602	PQVIHD75188P PQVIBU3140	IC IC	1
IC602	PQVIBU3140	IC	1
IC602 IC603,604	PQVIBU3140	IC	1
IC602 IC603,604	PQVIBU3140	IC IC	1
IC602 IC603,604 ,605	PQVIBU3140 PQVINJM4558D	IC IC (TRANSISTORS)	1 3
IC602 IC603,604 ,605	PQVIBU3140 PQVINJM4558D DTA143XA	IC IC (TRANSISTORS) Transistor (Si)	1 3
IC602 IC603,604 ,605	PQVIBU3140 PQVINJM4558D	IC IC (TRANSISTORS)	1 3
IC602 IC603,604 ,605	PQVIBU3140 PQVINJM4558D DTA143XA	IC IC (TRANSISTORS) Transistor (Si)	1 3
IC602 IC603,604 ,605 Q600 Q601,602	PQVIBU3140 PQVINJM4558D DTA143XA	IC IC (TRANSISTORS) Transistor (Si)	1 3
IC602 IC603,604 ,605 Q600 Q601,602 ,603	PQVIBU3140 PQVINJM4558D DTA143XA DTC124EA	IC IC (TRANSISTORS) Transistor (Si) Transistor (Si)	1 3

Pcs	Ref. No.	Part Name & Description	Pcs
		DIODEO	
L	1,004.04	(DIODES)	_
D600,601	1SS131	Diode (Si)	2
		(COILS)	
L600,603	PQLQZM1R5M	Choke Coil	,
L601,602	PQLQZM2R2M	Choke Coil	2 3
,604	FULUZIVIZAZIVI	Choke Coll	3
,004			
		(CAPACITORS)	
C600-605	ECKD1H102KB	0.001	6
,614		0.00 /	ľ
C603,606	ECKD1H223MD	0.022	3
,607			
C608	ECQM1H332JV	0.0033	1
C609,611	ECQV1H104JZ	0.1	3
,626			-
C610	ECQM1H682JV	0.0068	1
C612	ECQV1H473JZ	0.047	1
C613	ECQV1H683JZ	0.068	1 1
C615	ECQM1H222JV	0.0022	1
C616	ECQV1H124JZ	0.12	1
C617,621	ECQM1H103JV	0.01	2
C618	ECEA1HU330	33	1
C619,620	ECEA1HU4R7	4.7	2
C622,623	ECEA1HU010	1	2
C630	ECEA1HU100	10 S	1
C640	ECQV1H104JZ	0.1	1
		(RESISTORS)	
R600	ERD25TJ561	560	1
R601	ERD16TJ224	220k	1
R602,611	ERD16TJ273	27k	2
R603	ERD16TJ124	120k	1
R604	ERD16TJ393	39k	1
R605,606	ERD16TJ103	10k	5
,607,621		,	
,623			
R608,609	ERD16TJ104	100K	3
,610	+		
R612,622	ERD16TJ223	22k	2
R613	ERD16TJ102	1k	1
R614	ERD16TJ563	56k	1
R615,616	ERD16TJ123	12k	2
R617	ERD16TJ222	2.2k	1
R618	ERD16TJ474	470k	1
R619,640	ERD16TJ472	4.7k	. 2
R620	ERD16TJ334	330k	1
R630,631	ERD16TJ822	8.2k	3
,632	EDD467 ISSS	l coi.	
R633	ERD16TJ683	68k	1
		(OTHERS)	
E301	PQJP26D69Z	(OTHERS)	,
E301	PQJS25P3Z	Connector Plug, 26P (CN4) EIA Connector (CN16)	1 1
E302	FQ0325F3Z	EIA Connector (CN16)	
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